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July 19, 2004

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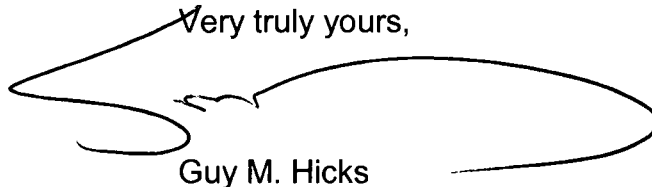
Hon. Pat Miller, Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Petition of DIECA Communications, Inc., d/b/a Covad Communications Company for Arbitration of Interconnection Agreement Amendment with BellSouth Telecommunications, Inc., Pursuant to Section 252(b) of the Telecommunications Act of 1996*
Docket No. 04-00186

Dear Chairman Miller:

Enclosed are the original and fourteen copies of BellSouth's *Response to Petition*. Copies of the enclosed are being provided to counsel of record.

Very truly yours,



Guy M. Hicks

GMH:ch

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

In Re: *Petition of DIECA Communications, Inc., d/b/a Covad Communications Company for Arbitration of Interconnection Agreement Amendment with BellSouth Telecommunications, Inc., Pursuant to Section 252(b) of the Telecommunications Act of 1996*

Docket No. 04-00186

**BELLSOUTH TELECOMMUNICATIONS, INC.'S
RESPONSE TO PETITION**

INTRODUCTION

BellSouth Telecommunications, Inc. ("BellSouth"), responds to the *Petition for Arbitration* ("*Petition*") filed by DIECA Communications, Inc., d/b/a Covad Communications Company ("Covad")¹ and states as follows:

Covad's *Petition*, while styled as an arbitration proceeding, is more accurately described as a dispute arising from a change of law and should be converted accordingly. At issue are those changes resulting from the August 21, 2003 *Triennial Review Order*² issued by the Federal Communications Commission

¹ Communications regarding BellSouth's Response to this *Petition* should be directed to:

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² Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 18 FCC Rcd 16978 (2003) ("*Triennial Review Order*" or "TRO"), *reversed in part on other grounds, United States Telecom Ass'n v. FCC*, Nos. 00-1012, *et al* (D.C. Cir Mar 2, 2004) ("*USTA II*").

("FCC"). In the *Triennial Review Order* the FCC decided that line sharing is no longer an unbundled network element that incumbent LECs are required to offer pursuant to Section 251 of the Act. *Triennial Review Order*, ¶ 260. The FCC adopted a transitional mechanism for both new and existing line sharing arrangements (*Triennial Review Order* ¶¶ 264-269), the terms of which BellSouth seeks to incorporate as an amendment to the current Interconnection Agreement ("Agreement") between it and Covad, which expires on December 19, 2004. Despite the clear language contained within the *Triennial Review Order* concerning line sharing, which language was not impacted by *USTA II*, Covad has filed a *Petition* in which it invites the Authority to completely ignore the FCC's line sharing transitional mechanism. The Authority should reject Covad's invitation.

BACKGROUND

The Agreement between BellSouth and Covad is a regionwide agreement effective in the states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee.³ On or about October 16, 2003, BellSouth provided Covad with written notice that a change of law had occurred pursuant to the terms of the parties' agreement. On December 4, 2003, BellSouth provided Covad with its proposed amendment to incorporate changes to the parties' agreement reflecting the *TRO* ("*TRO Amendment*"). In response to Covad's request that BellSouth provide its proposed amendment in redline format, on February 9, 2004, BellSouth provided Covad with a highlighted version of its

³ The Agreement expires on December 19, 2004, and the parties have begun the process of negotiating a replacement interconnection agreement. In addition, on July 1, 2004, BellSouth provided Covad with written notice of a change of law as well as its proposed language arising from the *USTA II* decision.

Amendment in order to clearly designate the changes necessary to reflect the *TRO*. On February 10, 2004, Covad notified BellSouth that it would provide a redline to BellSouth's amendment "shortly," although it never did so.

Instead, on April 16, 2004, after the issuance of the *USTA II* decision, Covad responded to the *TRO Amendment* by providing its proposed language concerning line sharing only. Covad did not respond with any other proposed changes to any other aspect of the *TRO Amendment*, but instead filed its *Petition* on June 23, 2004. Covad filed a similar petition with the North Carolina Utilities Commission on June 24, 2004, which included the prefiled testimony of William H. Weber. Mr. Weber's prefiled testimony in North Carolina stated that Covad "rejected" BellSouth's *TRO Amendment*.

While Covad's petition is styled as a *Petition for Arbitration*, it results from the application of the "change of law" provisions in parties' Agreement, and is not an arbitration petition within the meaning of 47 U.S.C. § 252. Covad effectively concedes as much by referring to Sections 12 and 16 of the Agreement in its *Petition*. BellSouth does not object to Covad invoking the terms of Sections 12 and 16 of the Parties' Agreement; however, such dispute resolution provisions do not transform this matter into an arbitration proceeding under Section 252.

Covad also suggests the Authority need only address line sharing in this proceeding. While BellSouth believes that the *Triennial Review Order* clearly sets forth the manner in which it is obligated to provide line sharing and thus there is really nothing for the Authority to address with respect to this issue, Covad's suggestion conveniently ignores other aspects of the *Triennial Review Order*.

There are other aspects of the *Triennial Review Order* that were not reversed by *USTA II* that must be incorporated into parties' Agreement and that should be resolved as part of this proceeding. Consequently, BellSouth includes additional matters for resolution in this proceeding. These additional modifications to the current Agreement arise solely from the *Triennial Review Order*, and were not impacted by *USTA II*. For ease of reference, BellSouth includes as Exhibit "A" a redlined version of Attachment 2 to the parties' Agreement, which shows only the *Triennial Review Order* changes.⁴ Exhibit A includes modifications that were previously sent to Covad as part of BellSouth's *TRO Amendment* on December 8, 2003 and that were also included in the highlighted *TRO Amendment* provided to Covad on February 9, 2004. Exhibit A has been modified from the *TRO Amendment* provided to Covad so that it reflects solely those changes arising from the *Triennial Review Order* that were not impacted by the *USTA II* decision.

Covad provided BellSouth with counter-language to the line-sharing aspect of BellSouth's *TRO Amendment* proposal only, and, as stated above, included in testimony that accompanied its North Carolina petition that it had "rejected" BellSouth's proposed *TRO Amendment*. BellSouth includes as Exhibit "B" a revised issues matrix, which includes the line sharing issue that Covad raised in its petition as well as other issues, all of which arise from the *Triennial Review Order*. Consistent with Mr. Weber's North Carolina testimony, BellSouth has indicated Covad's rejection of BellSouth's proposed language. Exhibit "B" includes a cross-

⁴ Because BellSouth has very recently provided Covad with its proposed changes necessitated by *USTA II*, it is not seeking dispute resolution of any modifications arising from *USTA II* at this time

reference to the relevant portion of Exhibit A as well as citations to the applicable portions of the *Triennial Review Order*. BellSouth also includes as Exhibit "C" the actual amendment to the Agreement that BellSouth requests the Authority adopt and approve as the appropriate resolution of the change of law dispute between the parties.

SPECIFIC RESPONSES

BellSouth responds below to each of the separately numbered paragraphs of the *Petition*:

PARTIES

1. The allegations in Paragraph 1 of the *Petition* require no response from BellSouth. To the extent a response would be appropriate, BellSouth lacks sufficient information to form a belief as to the truth of the matter asserted and would, therefore, deny the allegations in Paragraph 1 of the *Petition*.

2. BellSouth admits the allegations in Paragraph 2 of the *Petition*.

JURISDICTION

3. BellSouth states that the relevant provisions of the parties' Agreement and the 1996 Act speak for themselves and require no response from BellSouth. BellSouth admits that its proposed *TRO Amendment* included the transitional mechanism for line sharing arrangements, including pricing, articulated by the FCC in the *Triennial Review Order* and set forth in 47 C.F.R. § 51.319(a)(1)(i). BellSouth admits that Covad provided BellSouth with a counter-proposal on April 16, 2004, accompanied by a letter in which Covad recognized that any discussion between the parties concerning access to line sharing on a commercial basis arose

during the course of “independent negotiations”. Such independent negotiations are not properly the subject of a dispute resolution proceeding with the Authority. BellSouth denies any remaining allegations in Paragraph 3.

4. BellSouth states that the relevant provisions of the parties’ Agreement speak for themselves and require no response from BellSouth. BellSouth admits that Covad can petition the Authority to resolve disputes, but denies that the specific relief that Covad seeks is within the subject matter jurisdiction of the Authority. BellSouth further states that the Authority can and should resolve this matter by ordering the parties’ to amend the Agreement to reflect all aspects of the *TRO* that were not impacted by *USTA II*.

STANDARD OF REVIEW

5. BellSouth denies that Covad has filed an arbitration petition pursuant to Section 252 of the 1996 Act and further denies that the Authority has subject matter jurisdiction to enforce the provisions of Sections 201, 202, and 271 of the 1996 Act. BellSouth admits that the effective rules adopted by the FCC, specifically 47 C.F.R. § 51.319(a)(1)(i) should resolve this dispute.

ISSUES IN DISPUTE

6. BellSouth’s December 4, 2003 *TRO Amendment* speaks for itself and requires no response from BellSouth. BellSouth admits that, after it sent Covad its *TRO Amendment*, and then sent Covad a highlighted version of its *TRO Amendment*, that Covad only proposed counter-language concerning line sharing, and based upon its North Carolina testimony, rejected all other aspects of BellSouth’s *TRO Amendment*. Line sharing, however, was not the only issue that

was unaffected by the *USTA II* decision; therefore, the Authority should resolve all changes necessitated by the *Triennial Review Order* that were not reversed or vacated by *USTA II* in this proceeding. BellSouth includes with this response Exhibits A, B, and C, which, respectively, properly reflect all necessary *Triennial Review Order* changes to the Parties' Agreement, all disputed issues between the parties with cross-references to Exhibit A and citations to the applicable portions of the *Triennial Review Order*, and the amendment that the Authority should order the parties to execute to resolve this dispute.

7. Covad's Attachment C speaks for itself and requires no response from BellSouth. BellSouth denies that Attachment C reflects all disputed issues and directs the Authority to BellSouth's Exhibit B.

REQUESTED RELIEF


The matters raised in this proceeding are legal issues that can and should be addressed through the submission of briefs on an expedited basis. As to those issues over which the Authority has subject matter jurisdiction, such issues should be resolved in accordance with §§ 251 and 252 of the 1996 Act. The Authority lacks subject matter jurisdiction to enforce the provisions of Sections 201, 202, and 271 of the 1996 Act and should summarily reject Covad's attempt to circumvent the line sharing rulings of the *Triennial Review Order*. BellSouth states further that that on July 1, 2004, it filed an *Emergency Petition for Declaratory Ruling and Preemption of State Action* with the FCC in which it referred to Covad's *Petition* and in which it requested the FCC declare that state commissions have no jurisdiction over the rates, terms, and conditions of elements provided by RBOCs to

CLECs pursuant to Section 271.⁵ The Authority should adopt BellSouth's position on each issue identified herein and require the Parties to amend the Agreement to incorporate the changes proposed by BellSouth. BellSouth denies the relief requested by Covad and states that the Authority should reject Covad's positions on each and every one of the issues set forth herein and, instead, adopt BellSouth's positions.

BellSouth denies each and every allegation in the *Petition* not expressly admitted herein, and demands strict proof thereof.

Respectfully submitted,

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⁵ BellSouth is not suggesting that line sharing is a 271 requirement. On the contrary, line sharing is not required by Section 271. In other proceedings, the Authority and other state commissions within BellSouth's region have not addressed whether BellSouth has an independent obligation to provide line sharing, nor is this an issue properly before state commissions given BellSouth's pending FCC petition. See Order on Reconsideration, Docket No. 7892 (March 24, 2004); *also* Order Denying Motion to Modify SEEM Plan, Alabama Public Service Commission, Docket No. 25835 (Feb. 13, 2004); Order No. PSC-04-0511-PAA-TP, Florida Public Service Commission Docket No. 000121A-TP (May 19, 2004); Order on Reconsideration, North Carolina Utilities Commission Docket No. P-100, Sub 133k (July 13, 2004).

Exhibit A

Attachment 2
Network Elements and Other Services

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ACCESS TO NETWORK ELEMENTS AND OTHER SERVICES

1. Introduction

- 1.1. This Attachment sets forth the unbundled network elements and combinations of unbundled network elements that BellSouth agrees to offer to Covad in accordance with its obligations under Section 251(c)(3) of the Act. The specific terms and conditions that apply to the unbundled network elements are described below in this Attachment 2. The price for each unbundled network element and combination of unbundled Network Elements are set forth in Exhibit C of this Agreement
- 1.2. For purposes of this Agreement, "Network Element" is defined to mean a facility or equipment provided by BellSouth on an unbundled basis as is used by the CLEC in the provision of a telecommunications service. These unbundled network elements will be consistent with the requirements of the FCC 319 rule. For purposes of this Agreement, combinations of Network Elements shall be referred to as "Combinations."
 - 1.2.1. Except as otherwise required by law, BellSouth shall not impose limitation restrictions or requirements or requests for the use of the network elements or combinations that would impair the ability of Covad to offer telecommunications service in the manner Covad intends.
 - 1.2.2. Except upon request by Covad, BellSouth shall not separate requested network elements that BellSouth currently combines.
- 1.3. BellSouth shall, upon request of Covad, and to the extent technically feasible, provide to Covad access to its network elements for the provision of Covad's telecommunications service. If no rate is identified in the contract, the rate for the specific service or function will be negotiated by the Parties upon request by either Party.
- 1.4. Covad may purchase network elements and other services from BellSouth for the purpose of combining such network elements in any manner Covad chooses to provide telecommunication services to its intended users, including recreating existing BellSouth services. With the exception of the sub-loop elements which are located outside of the central office, BellSouth shall deliver the network elements purchased by Covad for combining to the designated Covad collocation space. The network elements shall be provided as set forth in this Attachment.
- 1.5. BellSouth shall comply with the requirements as set forth in the technical references within Attachment 2 unless BellSouth's actual performance or applicable industry

standards are greater than such technical reference, in which event BellSouth shall provide UNE's at such greater level. In the event the applicable industry standard exceeds the BellSouth technical reference, BellSouth shall provide UNE's consistent with the Industry Standard within ninety (90) days of notice from Covad that the industry standard exceeds the BellSouth technical reference.

- 1.6. In the event that any effective legislative, regulatory, judicial or other legal action modifies or redefines the "Network Elements" in a manner which materially affects the terms of this Attachment or the Network Elements and/or prices set forth herein, either Party may, on thirty (30) days written notice, require renegotiation of such terms, and the Parties shall renegotiate in good faith such new terms in accordance with such legislative, regulatory, judicial or other legal action. In the event such new terms are not renegotiated within ninety (90) days after the notice for renegotiation, either Party may petition the Commission for resolution of the dispute between the Parties. Each Party reserves the right to seek judicial review of any Commission ruling concerning this Attachment.
- 1.7. Covad will adopt and adhere to the standards contained in the applicable CLEC Work Center BellSouth Operational Understanding Agreement regarding maintenance and installation of service.
- 1.8. If one or more of the requirements set forth in this Agreement are in conflict, the parties shall mutually agree on which requirement shall apply. If the parties cannot reach agreement, the dispute resolution process set forth in Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by this reference, shall apply.

1.9 Commingling of Services

- 1.9.1 Commingling means the connecting, attaching, or otherwise linking of a Network Element, or a Network Element combination, to one or more telecommunications services or facilities that <<customer short name>> has obtained at wholesale from BellSouth, or the combining of a Network Element or Network Element combination with one or more such wholesale telecommunications services or facilities.
- 1.9.2 Subject to the limitations set forth elsewhere in this Attachment, BellSouth shall not deny access to a Network Element or a combination of Network Elements on the grounds that one or more of the elements: 1) is connected to, attached to, linked to, or combined with such a facility or service obtained from BellSouth; or 2) shares part of BellSouth's network with access services or inputs for non-qualifying services.
- 1.9.3 BellSouth will not "ratchet" a commingled circuit. Unless otherwise agreed to by the Parties, the Network Element portion of such circuit will be billed at the rates set forth in this Agreement and the remainder of the circuit or service will be billed in accordance with BellSouth's tariffed rates.

1.9.4 When multiplexing equipment is attached to a commingled circuit, the multiplexing equipment will be billed from the same jurisdictional authorization (agreement or tariff) as the higher level of service and the Central Office Channel Interfaces will be billed from the same jurisdictional authorization (agreement or tariff) as the lower level of service.

2. Unbundled Loops, Integrated Digital Loop Carriers, Network Interfaces Device, Unbundled Loop Concentration (ULC) System, Sub loops and Dark Fiber

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of unbundled loops.

2.1 Unbundled Loops

2.1.1 Definition

2.1.2 The local loop network element ("Loop(s)") is defined as a transmission facility between a distribution frame (or its equivalent) in BellSouth's central office and the loop demarcation point at an end-user customer premises, including inside wire owned by BellSouth. The local loop network element includes all features, functions, and capabilities of the transmission facilities, including dark fiber and attached electronics (except those used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers) and line conditioning.

2.1.2.1 The Loop does not include any packet switched features, functions or capabilities.

2.1.2.2 In new build (Greenfield) areas, where BellSouth has only deployed Fiber To The Home (FTTH) facilities, BellSouth is under no obligation to provide Loops.

2.1.2.3 In FTTH overbuild situations where BellSouth also has copper Loops, BellSouth will make those copper Loops available to <<customer short name>> on an unbundled basis, until such time as BellSouth chooses to retire those copper Loops using the FCC's network disclosure requirements. In these cases, BellSouth will offer a 64kbps second voice grade channel over its FTTH facilities.

2.1.2.4 Furthermore, in FTTH overbuild areas, BellSouth is not obligated to ensure that copper Loops in that area are capable of transmitting signals prior to receiving a request for access to such Loops by <<customer short name>>. If a request is received by BellSouth for a copper Loop, BellSouth will restore the copper Loop to serviceable condition if technically feasible. In these instances of Loop orders in an FTTH overbuild area, BellSouth's standard Loop provisioning interval will not apply, and the order will be handled on a project basis by which the Parties will negotiate the applicable provisioning interval.

2.1.2.5 For hybrid loops, where <<customer short name>> seeks access to a hybrid loop for the provision of broadband services, BellSouth shall provide <<customer short name>> with nondiscriminatory access to the time division multiplexing features, functions and capabilities of that hybrid loop, including DS1 or DS3, on an unbundled basis to establish a complete transmission path between BellSouth's central office and an End User's customer premises.

2.1.2.6 <<customer short name>> may not purchase Loops or convert Special Access circuits to Loops if such Loops will be used to provide wireless telecommunications services

2.1.3 The provisioning of service to a CLEC collocation space will require cross-office cabling and cross-connections within the central office to connect the loop to a local switch or to other transmission equipment. These cross-connects are a separate component, that are not considered a part of the loop, and thus have a separate charge.

2.1.4 The Loop shall be provided to Covad in accordance with BellSouth's TR73600 Unbundled Local Loop Technical Specification and applicable industry standard technical references. Covad shall be provided with six months notice of any changes to the existing loop specifications proposed by BellSouth to TR73600 after execution of this Agreement. The 6 months notification will not apply if Industry Standards, or legal or regulatory mandates require a different timeframe, if an applicable regulatory authority or industry forum requires modifications within a shorter time frame, or if otherwise agreed to by Covad and BellSouth.

Covad may utilize the unbundled Loops to provide any telecommunications service it wishes, so long as such serves are consistent with industry standards and BellSouth's TR73600.

BellSouth will only provision, maintain and repair the loops to the standards that are consistent with the type of loop ordered. In those cases where Covad has requested that BellSouth modify a loop so that it no longer meets the technical parameters of the original loop type, the resulting loop will be maintained as an Unbundled Copper Loop (UCL), and Covad shall pay the recurring and non-recurring charges for the resulting UCL.

2.1.5 BellSouth Order Coordination referenced in Attachment 2 includes two types: "Order Coordination" and "Order Coordination - Time Specific."

2.1.6 "Order Coordination" allows BellSouth and Covad to coordinate the installation of the SL2 Loops, Unbundled Digital Loops (UDL) and other Loops where OC may be purchased as an option, to Covad's facilities to limit end user service outage. OC is

available when the Loop is provisioned over an existing circuit that is currently providing service to the end user. Order coordination for physical conversions will be scheduled at BellSouth's discretion during normal working hours on the committed due date and Covad advised. OC shall be provided in accordance with the chart set forth below.

- 2.1.7 "Order Coordination – Time Specific" refers to service order coordination in which Covad requests a specific time for a service order conversion to take place. BellSouth will make every effort to accommodate Covad's specific conversion time request. However, BellSouth reserves the right to negotiate with Covad a conversion time based on load and appointment control when necessary. Loops on a single service order of 14 or more loops will be provisioned on a project basis. This is a chargeable option for any coordinated order and is billed in addition to the OC charge. Covad may specify a time between 9:00 a.m. and 4:00 p.m. (location time) Monday through Friday (excluding holidays). If Covad specifies a time outside this window, or selects a time or quantity of loops that requires BellSouth technicians to work outside normal work hours, overtime charges will apply in addition to the OC and OC-TS charges. Overtime charges will be applied according to actual costs based on type of force group required to perform the work, overtime hours worked and any special circumstances.
- 2.1.8 If Covad cancels an order for network elements and other services, any reasonable costs incurred by BellSouth in conjunction with the provisioning of that order will be recovered in accordance with FCC #1 Tariff, Section 5.4. If Covad cancels an order for network elements and other services prior to the DLR Date for provisioning of the loop, Covad shall not be required to pay the above referenced cancellation charge. Notwithstanding the foregoing, if Covad places an LSR based upon BellSouth's loop makeup information, and such information is inaccurate resulting in the inability of BellSouth to provision the network elements or services ordered in accordance with the transmission characteristics of the network elements or services ordered, cancellation charges described in this Section shall not apply. Where Covad places a single LSR for multiple network elements or services based upon loop makeup information, and information as to some, but not all, of the network elements or services is inaccurate, if BellSouth cannot provision the network elements or services that were the subject of the inaccurate loop makeup information, Covad may cancel its order as to those network elements or services without incurring cancellation charges as described in this Section. In such instance, should Covad elect to cancel the entire LSR, cancellation charges as described in this Section shall apply as to those elements and services that were not the subject of inaccurate loop makeup information. In order to obtain the credit in those loop makeup instances described above where a credit would be due, Covad must provide (1) backup documentation to confirm cancellation of the service order, such documentation to include the purchase order number and the order status; and (2) a copy of the correlating loop

makeup response output with the facility reservation number, such loop makeup response being the original catalyst for Covad's submission of the service order for the facility, which is the subject of the inaccurate loop makeup information; and (3) the Billing Adjustment Request (BAR) Form. Upon presentation of that information, BellSouth may investigate whether cancellation charges are appropriate. BellSouth shall issue the appropriate credit within 60 days of receiving the above referenced information from Covad, irrespective of whether it elected to perform an investigation. No other billing dispute process shall be required for Covad to obtain the necessary credit for these charges.

- 2.1.9 If a Covad order for a local loop is cancelled or modified by Covad or a Covad end-user, and the cancellation or modification is not caused by BellSouth, Covad will compensate BellSouth costs incurred by BellSouth for provisioning or accommodating the modification of the local loop, unless such costs are already being recovered through approved rates. Covad may charge BellSouth order modification or cancellation charges using the same rates and conditions as BellSouth utilizes for assessing such charges to Covad, if the modification or cancellation is caused by BellSouth.
- 2.1.10 BellSouth will offer Unbundled Voice Loops (UVL) in two different service levels - Service Level One (SL1) and Service Level Two (SL2).
- 2.1.11 Unbundled Voice Loops - SL1 loops are 2-wire loop start circuits, will be non-designed, and will not have remote access test points. OC will be offered as a chargeable option on SL1 loops when reuse of existing facilities has been requested by Covad. Covad may also order OC-TS when a specified conversion time is requested. OC-TS is a chargeable option for any coordinated order and is billed in addition to the OC charge. An Engineering Information (EI) document can be ordered as chargeable option. The EI document provides loop makeup information which is similar to the information normally provided in a Design Layout Record. Upon issuance of a non-coordinated order in the service order system, SL1 loops will be activated on the due date in the same manner and time frames that BellSouth normally activates POTS-type loops for its end users. If Covad requests work to be done for SL1s that requires BellSouth technicians to work outside normal work hours, overtime charges will be applied according to actual costs based on type of force group required to perform the work, overtime hours worked and any special circumstances.
- 2.1.12 Unbundled Voice Loop - SL2 loops may be 2-wire or 4-wire circuits, shall have remote access test points, and will be designed with a design layout record provided to Covad. SL2 circuits can be provisioned with loop start, ground start or reverse battery signaling. OC is provided as a standard feature on SL2 loops. The OC feature will allow Covad to coordinate the installation of the loop with the disconnect of an

existing customer's service and/or number portability service. In these cases, BellSouth will perform the order conversion with standard order coordination at its discretion during normal work hours.

- 2.1.13 BellSouth will also offer Unbundled Digital Loops (UDL). They will be designed, will be provisioned with test points (where appropriate), and will come standard with Order Coordination and a Design Layout Record (DLR).
- 2.1.14 As a chargeable option on all loops except the Universal Digital Channel (UDC) and all Unbundled Copper Loops (UCLs), BellSouth will offer Order Coordination - Time Specific (OC-TS). This will allow Covad the ability to specify the time that the coordinated conversion takes place. The OC-TS charge for orders due on the same day at the same location will be applied on a per Local Service Request (LSR) basis.
- 2.1.15 Covad will be responsible for testing and isolating troubles on the loops. Once Covad has isolated a trouble to the BellSouth provided loop, Covad will issue a trouble to BellSouth on the loop. BellSouth will take the actions necessary to repair the loop on the first trouble ticket opened. BellSouth will repair these loops in the same time frames that BellSouth repairs similarly situated loops to its customers.
- 2.1.16 If Covad reports a trouble and BellSouth appropriately tests its loop but finds no trouble, BellSouth will charge Covad for any dispatching and testing (inside and outside the CO for non-designed loops and outside the CO for designed loops) required by BellSouth in order to confirm the loop's working status. In the event BellSouth closes a Covad trouble ticket as "no trouble found," and Covad reports a subsequent trouble on the same loop within 30 days of the previous trouble ticket, Covad may provide to BellSouth in writing, using the Billing Adjustment Request (BAR) Form, the PON number of the order, the number of repeat trouble tickets and confirmation that the loop is currently operational. At that time, BellSouth shall investigate the trouble tickets to determine if the subsequent trouble was in fact the same trouble that had been previously reported and closed as "no trouble found." If the investigation reveals that the subsequent trouble was the same trouble reported by Covad within 30 days prior to the subsequent trouble, BellSouth shall credit Covad for all charges related to those trouble tickets within 60 days of Covad's providing the information specified above. No other formal billing dispute shall be required to obtain this credit. If the investigation reveals that the subsequent trouble was unrelated to the previous reported trouble, no credit will be due to Covad where the trouble tickets were closed as "no trouble found."
- 2.1.17 xDSL Capable Loops

BellSouth will offer loops capable of supporting telecommunications services such as: POTS, Centrex, basic rate ISDN, analog PBX, voice grade private line, ADSL,

HDSL, DS1 and digital data (up to 64 kb/s). Specifically, BellSouth shall make available the following:

- 2.1.17.1 ADSL: Asymmetrical Digital Subscriber Line (ADSL) Capable Loop: These copper loops are provisioned according to the Revised Resistance Design (RRD) industry standards which means they may be up to 18,000 feet long and may have up to 6,000 feet of bridged tap which is included in of the loop length.
- 2.1.17.2 HDSL: High Big Rate Digital Subscriber Line (HDSL) Capable Loop: These copper loops are provisioned according to the Industry Standard Carrier Service Area ("CSA") guidelines. It will be 12,000 feet or less on 24 gauge wire and 9,000 feet or less on 26 gauge wire, inclusive of up to 2,500 feet of bridged tap (with no one bridged tap exceeding 2000 feet).
- 2.1.17.3 xDSL: Subscriber Line ("DSL") technologies. The "x" in xDSL is a placeholder for the various types of digital subscriber line services. A loop is a dedicated transmission facility between a distribution frame, or its equivalent, in a BellSouth central office and the loop demarcation point at the customer premises.

An xDSL loop is a plain twisted pair of cooper loop of unlimited length without intervening devices, such as load coils, repeaters (unless so requested by the requesting carrier), or digital access main lines ("DAMLs"), and which may contain minimal bridge tap. A cooper loop used for such purposes will meet basic electrical standards such as metallic conductivity and capacitive and resistive balance.

- 2.1.17.4 UCL/short: an Unbundled Copper Loop (UCL). The UCL will be a copper twisted pair loop that is unencumbered by any intervening equipment (e.g., filters, load coils, range extenders, digital loop carrier, or repeaters). A short UCL (18 kft or less) will be provisioned according to Resistance Design parameters. The UCL is a dry cooper loop and is not intended to support any particular telecommunications service. Covad may use the UCL loop for a variety of services, including xDSL (e.g., ADSL and HDSL) services, by attaching appropriate terminal equipment of Covad's choosing. Covad will determine the type of service that will be provided over the loop. Because the UCL loop shall be an unbundled loop offering that is separate and distinct from BellSouth's ADSL and HDSL capable loop offerings, CLEC agrees that BellSouth's UCL loop will not be held to the service level and performance expectations that apply to its ADSL and HDSL unbundled loop offerings. BellSouth shall only be obligated to maintain copper continuity and provide balance relative to tip and ring on UCL loops.

~~2.1.17.5 UCL/long: Unbundled Copper Loop/long (UCL/long). The UCL will be a copper twisted pair loop that is unencumbered by any intervening equipment (e.g., filters, load coils, range extenders, digital loop carrier, or repeaters). A long UCL (18 kft or~~

~~more) will be provisioned with a maximum 2800 ohms resistance. The UCL is a dry copper loop and is not intended to support any particular telecommunications service. Covad may use the UCL loop for a variety of services, including xDSL (e.g., ADSL and HDSL) services, by attaching appropriate terminal equipment of Covad's choosing. Covad will determine the type of service that will be provided over the loop. Because the UCL loop shall be an unbundled loop offering that is separate and distinct from BellSouth's ADSL and HDSL capable loop offerings, CLEC agrees that BellSouth's UCL loop will not be held to the service level and performance expectations that apply to its ADSL and HDSL unbundled loop offerings. BellSouth shall only be obligated to maintain copper continuity and provide balance relative to tip and ring on UCL loops.~~

- 2.1.17.6 When attempting to provide copper-based loops, BellSouth will attempt to use any available copper facility that serves the end users address. This includes performing Line and Station Transfers (LSTs) to free up copper facilities that may be currently in use but could be provisioned using a different spare media that will support the service currently in use.
- 2.1.17.7 Where facilities are available, BellSouth will install ADSL, HDSL, UCL and UCL-ND loops in no more than a 5 business day interval from receipt of Firm Order Confirmation ("FOC"). For orders of 14 or more loops at the same address, the installation will be handled on a project basis and the intervals will be set by the BellSouth project manager for that order. Some loops require a Service Inquiry (SI) to determine if facilities are available prior to issuing the order. The interval for the SI process is separate from the installation interval. For expedite requests by Covad, expedite charges will apply for intervals less than 5 days. The charges outlined in BellSouth's FCC #1 Tariff, Section 5.1.1, will apply.
- 2.1.17.8 **ISDN/IDSL/UDC**
- 2.1.17.8.1 Due to technical limitations associated with certain DLC systems, certain ports on Digital Loop Carrier ("DLC") systems do not support ISDN Digital Subscriber Lines (IDSL).
- 2.1.17.8.2 BellSouth will offer the IDSL-Compatible Loop, known internally at BellSouth as the Universal Digital Channel (UDC), as a part of its Unbundled Digital Loop offerings as an xDSL capable loop. The IDSL-Compatible loop is compatible with IDSL service and has the same physical characteristics and transmission specifications as BellSouth's ISDN-capable loop. The technical specifications which govern this loop are those set forth in BellSouth's TR73600, which is in effect on the date of execution of this agreement.

- 2.1.17.8.3 Like the ISDN-capable loop, the IDSL-Compatible loop may be provisioned on copper or through a DLC system. When IDSL-Compatible loops are provisioned using a DLC system, BellSouth will ensure that they are only provisioned on time slots that are compatible with data-only services such as IDSL.
- 2.1.17.8.4 The Universal Digital Channel (UDC)/IDSL Compatible Loop shall be provisioned by BellSouth in no more than 10 business days from the date of the receipt of the Firm Order Confirmation.
- 2.1.17.8.5 The rates for the IDSL-Compatible shall be the same as the rates for ISDN loops, subject to true-up when and if BellSouth's proposed rates for the IDSL-Compatible are approved and accepted by a state commission.
- 2.1.17.8.6 Covad shall exclusively order the UDC for its IDSL service.

2.1.17.9 Acceptance Testing and Cooperative Testing

- 2.1.17.9.1 Cooperative Acceptance Testing is acknowledged by both BellSouth and Covad to assist in the timely and efficient provisioning of functioning loops. If both parties agree in writing that this testing is no longer necessary, it can be suspended at any time.
- 2.1.17.9.2 BellSouth will dispatch a technician to provide normal acceptance testing where BellSouth determines a dispatch is required to provision the loop. Normal acceptance testing includes: Placing a short on the tip and ring conductors, listening for tone, and placing a ground on tip and ring. BellSouth will call Covad with the technician on the line to perform the above mentioned tests and Covad will within 15 minutes begin testing with the technician. The BellSouth technician will test with Covad for a period not to exceed 15 minutes. Testing not considered to be normal acceptance testing as outlined above may be performed by BellSouth, if requested by Covad. BellSouth will charge and Covad will pay for additional acceptance testing, by paying additional acceptance charges as outlined in FCC No. 1 Tariff. BellSouth shall deliver loops which perform according to the characteristics of TR73600 for the particular loop ordered.
- 2.1.17.9.3 Where a technician is dispatched to provision a loop, the BellSouth technician shall tag a circuit for identification purposes. Where a technician is not dispatched by BellSouth, BellSouth will provide sufficient information to Covad to enable Covad to locate the circuit being provisioned. Upon delivery of the loop BellSouth will contact CLEC via a toll free number to provide notification of the completion of the loop and where required, provide acceptance testing as provided for in this agreement.

- 2.1.17.9.4 If Covad is not available to perform acceptance testing within 15 minutes of the time of loop turn up by BellSouth then CLEC may request and BellSouth, if mutually agreed to, will require the BellSouth technician to standby. CLEC would then be required to pay standby charges as provided for in FCC No. 1 Tariff.
- 2.1.17.9.5 If BellSouth is unable to contact a Covad employee to perform acceptance testing at the time of loop turn up (placed on hold for more than 15 minutes, reaches voice mail or other recording, no answer or repeated busy conditions), BellSouth will test the loop to ensure the loop is provisioned according to requirements of TR73600 for the type of loop requested by CLEC. BellSouth will complete the local service request without obtaining acceptance from Covad and will have no further obligation to perform normal acceptance testing of the provisioned loop. On any such orders where BellSouth completes the local service request without obtaining acceptance from Covad, BellSouth must provide the reason for which it was unable to contact Covad.
- If at any time Covad feels that the process described in this paragraph is not being appropriately executed by BellSouth, Covad may escalate to the appropriate BellSouth Manager for immediate resolution. Such resolution shall include but not be limited to: an immediate review of the processes described above by BellSouth personnel, joint meetings of the parties to mutually resolve issues and any other such action which both parties agree may need to be implemented to correct the process failure.
- 2.1.17.9.6 If the Acceptance Test fails loop Continuity Test parameters, as defined by TR73600 for the loop being provisioned, the BellSouth technician will take any or all reasonable steps, if possible, to immediately resolve the problem with CLEC on the line including, but not limited to, calling the central office to perform work or troubleshooting for physical faults. If the problem cannot be resolved in an expedient manner, the technician will release the CLEC representative, and perform the work necessary to correct the situation. Once the loop is correctly provisioned, BellSouth will re-contact the CLEC representative to repeat the Acceptance Test.
- 2.1.17.9.7 Both Parties declare they will work together, in good faith, to implement Acceptance Testing procedures that are efficient and effective. If the Parties mutually agree to additional testing, procedures and/or standards not covered by this Appendix or any Public Utilities Commission or FCC ordered tariff, the Parties will negotiate terms and conditions to implement such additional testing, procedures and/or standards.
- 2.1.17.9.8 BellSouth will not bill for loop repairs when the repair resulted from a BellSouth problem.

2.1.17.10 Unbundled Copper Loop – Non-Designed (UCL-ND)

- 2.1.17.10.1 The UCL-ND will be provisioned as a dedicated 2-wire metallic transmission facility from BellSouth's Main Distribution Frame to a customer's premises (including the NID). The UCL-ND will be a "dry copper" facility in that it will not have any intervening equipment such as load coils, repeaters, or digital access main lines ("DAMLs"), and may have up to 6,000 feet of bridged tap between the end user's premises and the serving wire center. The UCL-ND typically will be 1300 Ohms resistance and in most cases will not exceed 18,000 feet in length, although the UCL-ND will not have a specific length limitation. For loops less than 18,000 feet and with less than 1300 Ohms resistance, the loop will provide a voice grade transmission channel suitable for loop start signaling and the transport of analog voice grade signals. The UCL-ND will not be designed and will not be provisioned with either a design layout record or a test point.
- 2.1.17.10.2 The UCL-ND will be provisioned according to the specifications for the UCL-ND set forth in BellSouth's TR73600.
- 2.1.17.10.3 The UCL-ND facilities may be mechanically assigned using BellSouth's assignment systems. Therefore, the Loop Make Up process is not required to order and provision the UCL-ND. However, COVAD can request Loop Make Up for which additional charges would apply.
- 2.1.17.10.4 At Covad's option, Covad may request that BellSouth participate in Joint Acceptance Testing on the UCL-ND under the following terms, conditions, and rates. BellSouth shall take all steps necessary to complete an order for the UCL-ND. After BellSouth has confirmed that the UCL-ND loop meets the applicable technical specifications, BellSouth shall call Covad and participate in Joint Acceptance Testing. The charges for testing shall be assessed as follows: 1) At the time of testing, if the parties agree that the loop complies with technical specifications set forth in TR73600, Covad will pay for the Joint Acceptance Testing; 2) At the time of testing, if the parties agree that the loop does not comply with technical specifications set forth in TR73600, BellSouth shall not charge Covad for the Joint Acceptance Testing and any subsequent, technically feasible work and testing necessary to deliver a UCL-ND that meet the technical specifications; and 3) At the time of testing, if the Parties disagree as to whether the UCL-ND complies with applicable technical specifications, BellSouth and Covad will both dispatch a technician to the end user location at a mutually agreeable time. During this joint dispatch, the technicians will work cooperatively to isolate the trouble to the loop and will retest the loop to determine if the loop meets the applicable specifications. If the jointly dispatched test indicates that the UCL-ND meets applicable technical specifications, Covad will only be billed for the time associated with the first Joint Acceptance Test. If the jointly dispatched

testing indicates a non-conforming loop, then BellSouth will take whatever technically feasible action necessary to bring the loop into specifications. In such case, BellSouth will be responsible for all charges associated with Joint Acceptance Testing as well as the cost of the Covad technician's participation in the joint testing on a time and materials basis (rates will be negotiated and agreed to in advance). If the loop cannot be brought into specifications, then Covad may cancel the order and will not be charged cancellation charges for that loop. In the event the Commission establishes Joint Acceptance Testing rates different from those set forth herein, the Parties will amend this Agreement to incorporate such rates.

- 2.1.17.10.5 BellSouth will perform continuity validation on UCL-ND loops which require a dispatch to provision prior to order completion.
- 2.1.17.10.6 UCL-ND loops are not intended to support any particular service and may be utilized by COVAD to provide a wide-range of telecommunications services so long as those services do not adversely affect BellSouth's network. The UCL-ND will include a Network Interface Device (NID) at the customer's location for the purpose of connecting the loop to the customer's inside wire.
- 2.1.17.10.7 The UCL-ND will be delivered to COVAD's collocation space via a cross-connect. This cross-connect element will be provisioned as a part of BellSouth's Collocation offering.
- 2.1.17.10.8 Order Coordination (OC) will be provided as a chargeable option and may be utilized when the UCL-ND provisioning is associated with the reuse of BellSouth's facilities. Order Coordination -Time Specific (OC-TS) does not apply to this product.
- 2.1.17.10.9 COVAD may use BellSouth's Unbundled Loop Modification (ULM) offering to remove bridge tap and/or load coils from any loop within the BellSouth network. Therefore, some loops that would not qualify as UCL-ND could be transformed into loops that do qualify, using the ULM process.
- 2.1.17.10.10 The provisioning interval for the UCL-ND is as set forth in Section 2.1.8 of this Attachment.
- 2.1.17.10.11 When BellSouth provisions a UCL-ND, BellSouth will take necessary steps to identify the pair as an xDSL compatible loop. As such, when making modifications to its network, BellSouth will maintain the same specified physical characteristics of the UCL-ND in accordance with TR 73600 until the loop is disconnected by the CLEC or the end-user.

2.2 Loop Conditioning/Loop Modification

- 2.2.1 Subject to applicable and effective FCC rules and orders, BellSouth shall condition loops, as requested by Covad, whether or not BellSouth offers advanced services to the End User on that loop. BellSouth shall deliver a conditioned loop in no more than 14 business days from receipt of Firm Order Confirmation.
- 2.2.2 Loop conditioning is defined as the removal from the loop of any devices that may diminish the capability of the loop to deliver high-speed switched wireline telecommunications capability, including xDSL service. Such devices include, but are not limited to, bridge taps, low pass filters, and range extenders.
- 2.2.3 Charges for conditioning a loop, if any, will be determined by each state public service commission.
- 2.2.4 The unbundled Loop Modifications (ULM) offering provides the following elements: 1) removal of equipment on loops less than 18kft, 2) removal of equipment of loops longer than (18kft), 3) removal of bridged-taps on loops of any length.

2.3 Integrated Digital Loop Carriers

- 2.3.1 In the event that BellSouth has chosen to deploy Integrated Digital Loop Carrier (IDLC) systems to provide the local loop that do not permit unbundling of that local loop, BellSouth will provide a suitable alternative facility (such as a contiguous local copper loop which is in existence at that location and which is not currently being utilized by BellSouth or any other customer) without additional cost. If no alternate facility is available, BellSouth will utilize its Special Construction (SC) process to determine the additional costs required to provision the loop facilities.

2.4 Network Interface Device

2.4.1 Definition

The NID is defined as any means of interconnection of end-user customer premises wiring to BellSouth's distribution plant, such as a cross-connect device used for that purpose. The NID is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit at the point of demarcation at the end users premises. The NID features two independent chambers or divisions that separate the service provider's network from the End User's on-premises wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider and the End User each make their connections. The NID provides a protective ground connection and is capable of terminating cables such as twisted pair cable.

2.4.2. BellSouth shall permit Covad to connect Covad's loop facilities to on-premises wiring through the BellSouth NID or at any other technically feasible point.

2.4.3 Access to Network Interface Device (NID)

2.4.3.1. Due to the wide variety of NIDs utilized by BellSouth (based on subscriber size and environmental considerations), Covad may access the on-premises wiring by any of the following means: BellSouth shall allow Covad to connect its loops directly to BellSouth's multi-line residential NID enclosures that have additional space and are not used by BellSouth or any other telecommunications carriers to provide service to the premise. It is the responsibility of Covad to leave undisturbed the existing form of electrical protection and to maintain the physical integrity of the NID.

2.4.3.2. Where an adequate length of on-premises wiring is present and environmental conditions permit, either Party may remove the on-premises wiring from the other Party's NID and connect that wire to that Party's own NID; or

2.4.3.3. Enter the subscriber access chamber or "side" of "dual chamber" NID enclosures for the purpose of extending a connectorized or spliced jumper wire from the on-premises wiring through a suitable "punch-out" hole of such NID enclosures; or

2.4.3.4. Request BellSouth to make other rearrangements to the on-premises wiring terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting Party (i.e., Covad, its agent, the building owner or the subscriber). Such charges will be billed to the requesting Party.

2.4.3.5. In no case shall either Party remove or disconnect the other Party's loop facilities from either Party's NIDs, enclosures, or protectors, without state regulatory requirement, without providing prior notice to the other Party, and without appropriately capping off and guarding the other Party's loop. In such cases, it shall be the responsibility of the disconnecting party to properly ground the other party's loop, maintain the NID, and assume full liability for its action and any adverse consequences.

2.4.3.6. In no case shall either Party remove or disconnect ground wires from BellSouth's NIDs, enclosures, or protectors.

2.4.3.7. In no case shall either Party remove or disconnect NID modules, protectors, or terminals from BellSouth's NID enclosures.

2.4.3.8. Due to the wide variety of NID enclosures and outside plant environments BellSouth will work with Covad to develop specific procedures to establish the most effective means of implementing this Section, 2.4.3.

2.4.4 Technical Requirements

- 2.4.4.1 The NID shall provide an accessible point of interconnection and shall maintain a connection to ground.
- 2.4.4.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to Covad's NID, consistent with the NID's function at the Effective Date of this Agreement.
- 2.4.4.3 Where a BellSouth NID exists, it is provided in its "as is" condition. Covad may request BellSouth do additional work to the NID in accordance with Section 2.4.3.8.
- 2.4.4.4 When Covad deploys its own local loops with respect to multiple-line termination devices, Covad shall specify the quantity of NIDs connections that it requires within such device.
- 2.4.5 Interface Requirements
- 2.4.5.1 The NID shall be equal to or better than all of the requirements for NIDs set forth in the applicable industry standard technical references.

2.5 Unbundled Loop Concentration (ULC) System

- 2.5.1 BellSouth will provide to Covad Unbundled Loop Concentration (ULC). Loop concentration systems in the central office concentrate the signals transmitted over local loops onto a digital loop carrier system. The concentration device is placed inside a BellSouth central office. BellSouth will offer ULC with a TR008 interface or a TR303 interface.
- 2.5.2 ULC will be offered in two sizes. System A will allow up to 96 BellSouth loops to be concentrated onto multiple DS1s. The high-speed connection from the concentrator will be at the electrical DS1 level and may connect to Covad at Covad's collocation site. System B will allow up to 192 BellSouth loops to be concentrated onto multiple DS1s. System A may be upgraded to a System B. A minimum of two DS1s is required for each system (i.e., System A requires two DS1s and System B would require an additional two DS1s or four in total). All DS1 interfaces will terminate to the CLEC's collocation space. ULC service is offered with or without concentration and with or without protection. A Line Interface element will be required for each loop that is terminated onto the ULC system. Rates for ULC are as set forth in this Attachment.

2.6 Sub-loop Elements

- 2.6.1 BellSouth shall offer access to its Unbundled Sub Loop (USL), Unbundled Subloop Concentration (USLC) System and Unbundled Network Terminating Wire (UNTW)

elements. BellSouth shall provide non-discriminatory access, in accordance with 51.311 and section 251(c) (3) of the Act, to the subloop. On an unbundled basis and pursuant to the following terms and conditions and the rates approved by the Commission and set forth in this Attachment.

2.6.2 Subloop components include but are not limited to the following:

2.6.2.1 Unbundled Sub-Loop Distribution;

| 2.6.2.2 ~~Unbundled Sub-Loop Concentration/Multiplexing Functionality; and~~

2.6.2.3 Unbundled Network Terminating Wire; and

| 2.6.2.4 ~~Unbundled Sub-Loop Feeder~~

2.6.3 Unbundled Sub-Loop (distribution facilities)

2.6.3.1 Definition

2.6.3.2 The unbundled sub-loop distribution facility is dedicated transmission facility that BellSouth provides from a customer's point of demarcation to a BellSouth cross-connect device. The BellSouth cross-connect device may be located within a remote terminal (RT) or a stand-alone cross-box in the field or in the equipment room of a building. There are two offerings available for Unbundled Sub-Loops (USL):

2.6.3.3 Unbundled Sub-Loop Distribution (USL-D) will include the sub-loop facility from the cross-box in the field up to and including the point of demarcation.

2.6.3.4 BellSouth will also provide sub-loop interconnection to the intrabuilding network cable (INC) (riser cable). INC is the distribution facility inside a subscriber's building or between buildings on one customer's same premises (continuous property not separated by a public street or road). USL-INC (riser cable) will include the facility from the cross-connect device in the building equipment room up to and including the point of demarcation.

2.6.4. Requirements for Unbundled Sub-Loop Distribution Facilities

2.6.4.1 Unbundled Sub-Loop distribution facilities were originally built as part of the entire voice grade loop from the BellSouth central office to the customer network interface. Therefore, the Unbundled Sub-Loop may have load coils, which are necessary for transmission of voice grade services. The Unbundled Sub-Loops will be provided in accordance with technical reference TR73600.

- 2.6.4.2 Unbundled Sub-Loop distribution facilities shall support functions associated with provisioning, maintenance and testing of the Unbundled Sub-Loop. In a scenario that involves connection at a BellSouth cross-box located in the field, Covad would be required to deliver a cable to the BellSouth remote terminal or cross-box to provide continuity to Covad's feeder facilities. This cable would be connected, by a BellSouth technician, to a cross-connect panel within the BellSouth RT/cross-box. Covad's cable pairs can then be connected to BellSouth's USL within the BellSouth cross-box by the BellSouth technician. In a scenario that requires connection in a building equipment room, BellSouth will install a cross connect panel on which access to the requested sub-loops will be connected. The CLEC's cable pairs can then be connected to the Unbundled Sub-Loop pairs on this cross-connect panel by the BellSouth technician.
- 2.6.4.3 BellSouth will provide Unbundled Sub-Loops where possible. Through the firm order Service Inquiry (SI) process, BellSouth will determine if it is feasible to place the required facilities where Covad has requested access to Unbundled Sub-Loops. If existing capacity is sufficient to meet the CLEC demand, then BellSouth will perform the set-up work as described in the next section 2.6.4.4 . If any work must be done to modify existing BellSouth facilities or add new facilities (other than adding the cross-connect panel in a building equipment room as noted in 2.6.4.4) to accommodate Covad's request for Unbundled Sub-Loops, BellSouth will use its Special Construction (SC) process to determine the additional costs required to provision the Unbundled Sub-Loops. Covad will then have the option of paying the one-time SC charge to modify the facilities to meet Covad's request.
- 2.6.4.4 During the initial set-up in a BellSouth cross-connect box in the field, the BellSouth technician will perform the necessary work to splice the CLEC's cable into the cross-connect box. For the set-up inside a building equipment room, BellSouth will perform the necessary work to install the cross-connect panel that will be used to provide access to the requested USLs. Once the set-up is complete, the CLEC requested sub-loop pairs would be provisioned through the service order process based on the submission of a LSR to the LCSC.
- 2.6.5 Interface Requirements
- 2.6.5.1 Unbundled Sub-Loop shall be equal to or better than each of the applicable requirements set forth in the applicable industry standard technical references.

~~2.6.6 Unbundled Sub Loop Concentration System (USLC)~~

~~2.6.6.1 Where facilities permit and where necessary to comply with an effective Commission order, BellSouth will provide to Covad with the ability to concentrate its sub-loops onto multiple DS1s back to the BellSouth Central Office. The DS1s will then be~~

terminated into Covad's collocation space. TR-008 and TR303 interface standards are available.

~~2.6.6.2 USLC, using the Lucent Series 5 equipment, will be offered in two different systems. System A will allow up to 96 of Covad's sub-loops to be concentrated onto multiple DS1s. System B will allow an additional 96 of Covad's sub-loops to be concentrated onto multiple DS1s. One System A may be supplemented with one System B and they both must be physically located in a single Series 5 dual-channel bank. A minimum of two DS1s is required for each system (i.e., System A requires two DS1s and System B would require an additional two DS1s or four in total). The DS1 level facility that connects the RT site with the serving wire center is known as a Feeder Interface. All DS1 Feeder Interfaces will terminate to the CLEC's collocation space within the SWC that serves the RT where the CLEC's sub-loops are connected. USLC service is offered with or without concentration and with or without a protection DS1.~~

~~2.6.6.3 In these scenarios Covad would be required to place a cross box, remote terminal (RT), or other similar device and deliver a cable to the BellSouth remote terminal. This cable would be connected, by a BellSouth technician, to a cross-connect panel within the BellSouth RT/cross box and would allow Covad's sub-loops to then be placed on the ULSC and transported to their collocation space at a DS1 level.~~

2.6.7 Unbundled Network Terminating Wire (UNTW)

2.6.7.1 BellSouth agrees to offer its Unbundled Network Terminating Wire (UNTW) to Covad pursuant to the following terms and conditions at rates as set forth in this Attachment.

2.6.7.2 Definition

2.6.7.2.1 Subject to applicable and effective FCC rules and orders, UNTW is a dedicated transmission facility that BellSouth provides from the Wiring Closet /Garden Terminal (or other type of cross-connect point) at the point of termination of BellSouth's loop distribution facilities to the end user's point of demarcation.

2.6.7.3 Requirements

2.6.7.3.1 BellSouth will offer spare pairs that are available to an end user's premises to Covad. Available spare pairs are defined as pairs that are not being utilized by BellSouth or by a third party to provide an end user with working service at the time of Covad's request for UNTW. If no spare pairs are available and the end user is no longer using BellSouth's local service, BellSouth will relinquish the first pair to Covad. If after BellSouth has relinquished the first pair to Covad and the end user decides to change

local service providers to BellSouth, Covad will relinquish the first pair back to BellSouth.

- 2.6.7.3.2 Notwithstanding the foregoing, should BellSouth subsequently require the use of additional pair(s) to provide for the activation of additional lines in an end users premises in response to a request from such end user, Covad agrees to surrender its spare pair(s) upon request by BellSouth.
- 2.6.7.3.3 If an end user of Covad desires to receive local exchange service from a service provider who is not a Party to this Agreement, and such third party service provider needs access to the BellSouth UNTW to provide local exchange service to the end user, then Covad agrees to surrender the requisite number of its inactive spare pair(s) if no other spare pair is available and upon request by BellSouth.
- 2.6.7.3.4 If Covad has placed NTW at a location and an end user desires to receive local exchange service from BellSouth and BellSouth needs access to Covad's NTW to provide local exchange service to the end user, then Covad agrees to surrender the requisite number of its spare pair(s) upon request by BellSouth.
- 2.6.7.3.5 In new construction, where possible, both Parties may at their option and with the property owner's agreement install their own NTW. In existing construction, BellSouth shall not be required to install new or additional NTW beyond existing NTW to provision the services of the CLEC.
- 2.6.8 Technical Requirements
- 2.6.8.1 In these scenarios, BellSouth will connect the requested UNTW pairs to a single point of interconnection (SPOI) designed for CLEC access to BellSouth's NTW. The SPOI will be installed either near BellSouth's garden terminal or wiring closet. Covad will be required to place a cross-box, terminal or other similar device and deliver a cable to this SPOI. Covad will then connect their cable to the cross-connect panel to access the requested UNTW pairs.

2.7 Dark Fiber

2.7.1 Definition

Dark Fiber is optical transmission facilities without attached multiplexing, aggregation or other electronics that connects two points within BellSouth's network. Dark Fiber also includes strands of optical fiber existing in aerial or underground cable which may have lightwave repeater (regenerator or optical amplifier) equipment interspliced to it at appropriate distances, but which has no line terminating elements terminated to such strands to operationalize its transmission capabilities.

2.7.2 Requirements

- 2.7.2.1 BellSouth shall make available Dark Fiber where it exists in BellSouth's network and where, as a result of future building or deployment, it becomes available. If BellSouth has plans to use the fiber within a two –year planning period, there is no requirement to provide said fiber to Covad.
- 2.7.2.2 If the requested dark fiber has any lightwave repeater equipment interspliced to it, BellSouth will remove such equipment at Covad's request subject to time and materials charges.
- 2.7.2.3 Covad may test the quality of the Dark Fiber to confirm its usability and performance specifications.
- 2.7.2.4 BellSouth shall use its best efforts to provide to Covad information regarding the location, availability and performance of Dark Fiber within ten (10) business days for a records based answer and twenty (20) business days for a field based answer, after receiving a request from Covad ("Request"). Within such time period, BellSouth shall send written confirmation of availability of the Dark Fiber ("Confirmation"). From the time of the Request to forty-five (45) days after Confirmation, BellSouth shall hold such requested Dark Fiber for Covad's use and may not allow any other party to use such media, including BellSouth.
- 2.7.2.5 BellSouth shall use its best efforts to make Dark Fiber available to Covad within thirty (30) business days after it receives written confirmation from Covad that the Dark Fiber previously deemed available by BellSouth is wanted for use by Covad. This includes identification of appropriate connection points (e.g., Light Guide Interconnection (LGX) or splice points) to enable Covad to connect or splice Covad provided transmission media (e.g., optical fiber) or equipment to the Dark Fiber.
- 2.7.2.6 Dark Fiber shall meet the manufacturer's design specifications.
- 2.7.2.7 Covad may splice and test Dark Fiber obtained from BellSouth using Covad or Covad designated personnel. BellSouth shall provide appropriate interfaces to allow splicing and testing of Dark Fiber. BellSouth shall provide an excess cable length of 25 feet minimum (for fiber in underground conduit) to allow the uncoiled fiber to reach from the manhole to a splicing van.

2.8 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

2.9 Operational Support Systems (OSS)

BellSouth has developed and made available the following mechanized systems by which Covad may submit LSRs electronically.

LENS	Local Exchange Navigation System
EDI	Electronic Data Interchange
TAG	Telecommunications Access Gateway

2.9.1 LSRs submitted by means of one of these interactive interfaces will incur an OSS electronic ordering charge as specified in the table below. An individual LSR will be identified for billing purposes by its Purchase Order Number (PON). LSRs submitted by means other than one of these interactive interfaces (mail, fax, courier, etc.) will incur a manual order charge as specified in the table below:

OPERATIONAL SUPPORT SYSTEMS	AL, GA, MS, NC, SC, TN	KY	FL	LA
OSS LSR charge, per LSR received from the CLEC by one of the OSS interactive interfaces	\$3.50 SOMECH	\$3.50 SOMECH	\$3.50 SOMECH	\$3.50 SOMECH
Incremental charge received from the CLEC by means other than one of the OSS interactive interfaces	See applicable rate element – applied on a per element basis SOMAN	\$19.99 applied on a per LSR basis SOMAN	\$10.73 applied on a per LSR basis SOMAN	\$15.20 applied on a per LSR basis SOMAN

For network elements and service for which BellSouth makes available an electronic ordering mechanism, Covad shall pay the manual ordering charge when it submits a manual order, unless Covad submitted the manual order when the electronic systems were non functional for any reason other than scheduled maintenance and downtime. For network elements and services for which BellSouth does not make available a electronic ordering mechanism, Covad shall pay the manual ordering rate for manually submitted orders. Notwithstanding the foregoing, if BellSouth's retail operations have electronic ordering capabilities for services analogous to those provided by BellSouth to Covad and BellSouth does not make electronic ordering available to Covad, Covad shall pay the electronic ordering rate for those services, irrespective of whether the orders are placed manually or electronically.

2.9.2 Denial/Restoral OSS Charge

In the event Covad provides a list of customers to be denied and restored, rather than an LSR, each location on the list will require a separate PON and, therefore will be billed as one LSR per location.

- 2.9.3 Covad will incur an OSS charge for an accepted LSR that is later canceled by Covad, except when BellSouth does not deliver the loop within seven (7) days of the standard loop delivery interval for each particular loop.

Note: Supplements or clarifications to a previously billed LSR will not incur another OSS charge.

2.9.4 Network Elements and Other Services Manual Additive

- 2.9.4.1 The Commissions in some states have ordered per-element manual additive non-recurring charges (NRC) for Network Elements and Other Services ordered by means other than one of the interactive interfaces. These ordered Network Elements and Other Services manual additive NRCs will apply in these states, rather than the charge per LSR. The per-element charges are listed on the Rate Tables in Exhibit A.

2.10 Loop Makeup (LMU)

2.10.1 Description of Service

- 2.10.1.1 BellSouth shall make available to Covad loop makeup information so that Covad can make an independent judgment about whether the loop is capable of supporting the advanced services equipment Covad intends to install and the services Covad wishes to provide. This section addresses LMU as a *preordering* transaction, distinct from Covad ordering any other service(s). Loop Makeup *Service Inquiries (LMUSI) for preordering loop makeup* are likewise unique from other preordering functions with associated service inquiries (SI) as described in this Agreement.
- 2.10.1.2 BellSouth will provide Covad LMU information consistent with the effective FCC Rules, Orders and Regulations including the composition of the loop material (copper/fiber); the existence, location and type of equipment on the loop, including but not limited to digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridged taps, load coils, pair-gain devices; the loop length; the wire gauge and electrical parameters.
- 2.10.1.3 BellSouth's LMU information is provided to Covad as it exists either in BellSouth's databases or in its hard copy facility records. BellSouth does not guarantee accuracy or reliability of the LMU information provided.
- 2.10.1.4 Covad may choose to use equipment that it deems will enable it to provide a certain type and level of service over a particular BellSouth loop. The determination shall be made solely by Covad and BellSouth shall not be liable in any way for the

performance of the advanced data services provisioned over said loop. The specific loop type (ADSL, HDSL, or otherwise) ordered on the LSR must match the LMU of the loop requested taking into consideration any requisite line conditioning. The LMU data is provided for informational purposes only and does not guarantee Covad's ability to provide advanced data services over the ordered loop type. Further, if Covad orders loops that are not intended to support advanced services (such as UV-SL1, UV-SL2, or ISDN compatible loops) and that are not inventoried as advanced services loops, the LMU information for such loops is subject to change at any time due to modifications and/or upgrades to BellSouth's network. Covad is fully responsible for any of its service configurations that may differ from BellSouth's technical standard for the loop type ordered.

2.10.2 Submitting Loop Makeup Service Inquiries

2.10.2.1 Covad may obtain LMU information by submitting a LMUSI mechanically or manually. Mechanized LMUSIs should be submitted through BellSouth's Operational Support Systems interfaces. After obtaining the loop from the mechanized LMUSI process, if Covad needs further loop information in order to determine loop service capability, Covad may initiate a separate Manual LMUSI for a separate nonrecurring charge as set forth in the rate exhibit for Attachment 2.

2.10.2.2 Manual LMUSIs shall be submitted by electronic-mail to BellSouth's Complex Resale Support Group (CRSG/Account Team utilizing the Preordering Loop Makeup Service Inquiry form. The service interval for the return of a Loop Makeup Manual Service Inquiry is three business days. Manual LMUSIs are not subject to expedite requests. This service interval is distinct from the interval applied to the subsequent service order.

2.10.3 Loop Reservations

2.10.3.1 Covad may reserve facilities for up to four (4) calendar days for each facility requested on a LMUSI from the time the LMU information is returned to Covad. During and prior to Covad placing an LSR, the reserved facilities are rendered unavailable to other customers, including BellSouth. If Covad does not submit an LSR for a UNE service on a reserved facility within the four-day reservation timeframe, the reservation of that spare facility will become invalid and the facility will be released. For a Mechanized LMUSI, Covad may reserve up to 10 loop facilities. For a Manual LMUSI, Covad may reserve up to 3 loop facilities.

2.10.3.2 Charges for preordering LMUSI are separate from any charges associated with ordering other services from BellSouth.

2.10.4 Ordering of Other UNE Services

2.10.4.1 All LSRs issued for reserved facilities shall reference the facility reservation number as provided by BellSouth. Covad will not be billed any additional LMU charges for the loop ordered on such LSR. If however, Covad does not reserve facilities upon an initial LMUSI, Covad's placement of an order for an advanced data service type facility shall be deemed placed for such a facility rate element that "includes manual service inquiry and reservation" per the rate matrix of this Attachment.

2.10.4.2 Where Covad has reserved multiple loop facilities on a single reservation, Covad may not specify which facility shall be provisioned when submitting the LSR. For those occasions, BellSouth will assign to Covad, subject to availability, a facility that meets the BellSouth technical standards of the BellSouth type loop as ordered by Covad. If the ordered loop type is not available, Covad may utilize the Unbundled Loop Modification process or the Special Construction process, as applicable, to obtain the loop type ordered.

2.11 High Frequency Spectrum Network Element

2.11.1 BellSouth shall provide Covad access to the high frequency portion of the local loop as an unbundled network element ("High Frequency Spectrum") at the revised line sharing rates set forth in Exhibit C. BellSouth shall provide Covad with the High Frequency Spectrum irrespective of whether BellSouth chooses to offer xDSL services on the loop.

2.11.1.1 The High Frequency Spectrum is defined as the frequency range above the voiceband on a copper loop facility carrying analog circuit-switched voiceband transmissions. Access to the High Frequency Spectrum is intended to allow Covad the ability to provide Digital Subscriber Line ("xDSL") data services to the end user for which BellSouth provides voice services. The High Frequency Spectrum shall be available for any version of xDSL presumed acceptable for deployment pursuant to 47 C.F.R. Section 51.230, including, but not limited to, ADSL, RADSL, and any other xDSL technology that is presumed to be acceptable for deployment pursuant to FCC rules. BellSouth will continue to have access to the low frequency portion of the loop spectrum (from 300 Hertz to at least 3000 Hertz, and potentially up to 3400 Hertz, depending on equipment and facilities) for the purposes of providing voice service. Covad shall only use xDSL technology that is within the PSD mask parameters set forth in T1.413 or other applicable industry standards. Covad shall provision xDSL service on the High Frequency Spectrum in accordance with the applicable Technical Specifications and Standards.

2.11.1.2 The following loop requirements are necessary for Covad to be able to access the High Frequency Spectrum: an unconditioned, 2-wire copper loop An unconditioned

loop is a copper loop with no load coils, low-pass filters, range extenders, DAMLs, or similar devices and minimal bridged taps consistent with ANSI T1.413 and T1.601. The process of removing such devices is called "conditioning." BellSouth shall charge and Covad shall pay as interim rates, the same rates that BellSouth charges for conditioning stand-alone loops as provided in this Interconnection Agreement (e.g., unbundled copper loops, ADSL loops, and HDSL loops) until permanent pricing for loop conditioning are established either by mutual agreement or by a state public utilities commission. The interim costs for conditioning are subject to true up as provided in this agreement. BellSouth will condition loops to enable Covad to provide xDSL-based services on the same loops the incumbent is providing analog voice service, regardless of loop length. BellSouth is not required to condition a loop in connection with Covad's access to the High Frequency Spectrum if conditioning of that loop impairs service from the end users perspective. If Covad requests that BellSouth condition a loop longer than 18,000 ft. and such conditioning significantly degrades the voice services on the loop, Covad shall pay for the loop to be restored to its original state.

2.11.1.3 Covad's termination point is the point of termination for Covad's on the toll main distributing frame in the central office (" Termination Point"). BellSouth will use jumpers to connect Covad's connecting block to the splitter. The splitter will route the High Frequency Spectrum on the circuit to the Covad's xDSL equipment in the Covad's collocation space.

2.11.1.4 For the purposes of testing line shared loops, Covad shall have access to the test access point associated with the splitter and the demarcation point between BellSouth's network and Covad's network.

2.11.2 PROVISIONING OF HIGH FREQUENCY SPECTRUM AND SPLITTER SPACE

2.11.2.1 BellSouth will provide Covad with access to the High Frequency Spectrum as follows:

2.11.2.2 BellSouth will install splitters within thirty-six (36) calendar days of Covad's submission of such order to the BellSouth Complex Resale Support Group.

2.11.2.3 BellSouth shall provide Covad the status of manually submitted LSRs for end user line sharing orders through the PON Report on the CLEC Operations Website at <https://clec.bellsouth.com>.

Status shall include FOC Sent, Pending, Cancelled, In Clarification, Jeopardies or Rejected. A description of these statuses can be found on this website. This is a secure website. Passwords can be obtained from your account team.

For LSRs submitted through an electronic interface (EDI, TAG, LENS, RoboTAG), the following responses will be returned to Covad electronically: FOCs, Completion Notices, Errors/Clarifications, Pending Order Status, Jeopardies, e.g. missed appointments. Covad may view CSRs through LENS.

Covad may determine the status of its line sharing end user service orders through CSOTS (CLEC Service Order Tracking System). The service order statuses are described in the Pending Order Status Job Aid located on the web at http://www.interconnection.bellsouth.com/markets/lec/oss_info.html. Passwords for CSOTS can be obtained from the account team.

Covad may determine the status of its COSMOS/SWITCH work order for its line sharing end user orders through the COSMOS/SWITCH Line Sharing Report. These reports will provide the telephone number, CLLI code, cable and pair, splitter assignment, status and in COSMOS service order number if pending. The reports also provide a summary including working pairs, pairs pending disconnect, pairs pending connect. The COSMOS/SWITCH report will be in a form that enables Covad to download it into an excel-type spreadsheet format. When Covad has received a Firm Order Confirmation ("FOC") on an order and the CSOTS system also shows that order as complete, but the order appears on the COSMOS/SWITCH report in the pending connect or pending disconnect status, Covad shall enter a trouble report through DLEC Tafi or report troubles to the BellSouth CWINS center. When Covad has received a FOC on an order and the order is pending in CSOTS beyond the due date of the order, then Covad shall check to see if BellSouth has provided a jeopardy or clarification notification via the PON Status Report. If there are no outstanding clarifications or jeopardies, Covad will contact the LCSC. The COSMOS/SWITCH report will be updated by 8:00 p.m., daily, Monday thru Sunday.

- 2.11.2.4 Covad shall be entitled to order the High Frequency Spectrum on lines served out of any central office where Covad has a splitter available for its use pursuant to Section 2.11.2.
- 2.11.2.5 BellSouth will select, purchase, install, and maintain a central office POTS splitter and provide Covad access to data ports on the splitter. In the event that BellSouth elects to use a brand of splitter other than Siecor, the Parties shall renegotiate the recurring and non-recurring rates associated with the splitter. In the event the Parties cannot agree upon such rates, the then current rates (final or interim) for the Siecor splitter shall be the interim rates for the new splitter. BellSouth will provide Covad with a carrier notification letter at least 30 days before such change and shall work collaboratively with Covad to select a mutually agreeable brand of splitter for use by BellSouth. Covad shall thereafter purchase ports on the splitter as set forth more fully below.

- 2.11.2.6 BellSouth will install the splitter in (i) a common area close to the Covad collocation area, if possible; or (ii) in a BellSouth relay rack as close to the Covad DSO termination point as possible. For purposes of this section, a common area is defined as an area in the central office in which both Parties have access to a common test access point. Nothing in this section shall be construed as Covad's agreement that such placement is the most efficient network configuration. Moreover, nothing in this section shall be construed as Covad's agreement that such placement is consistent with TELRIC pricing rules or otherwise is a network configuration that would be used by an efficient forward looking provider of unbundled network elements. Notwithstanding the foregoing, neither Party waives any rights to take a position contrary to the provisions of this Section before any regulatory body regarding line sharing processes or rates. BellSouth will cross-connect the splitter data ports to a specified Covad DS0 at such time that a Covad end user's service is established.
- 2.11.2.7 The High Frequency Spectrum shall only be available on loops on which BellSouth is also providing, and continues to provide, analog voice service directly to the end user. In the event the end-user terminates its BellSouth provided voice service for any reason, and Covad desires to continue providing xDSL service on such loop, Covad shall be required to purchase the full stand-alone loop unbundled network element. In the event BellSouth disconnects the end-user's voice service pursuant to its tariffs or applicable law, and Covad desires to continue providing xDSL service on such loop, Covad shall be permitted to continue using the line by purchasing the full stand-alone loop unbundled network element. BellSouth shall give Covad notice in a reasonable time prior to disconnect, which notice shall give Covad an adequate opportunity to notify BellSouth of its intent to purchase such loop. The Parties shall work collaboratively towards the method of notification and the time periods for notice. In those cases in which BellSouth no longer provides voice service to the end user and Covad purchases the full stand-alone loop, Covad may elect the type of loop it will purchase. Covad will pay the appropriate recurring and non-recurring rates for such loop as set forth in Attachment 2 of the Agreement, including a voice grade loop.
- 2.11.2.8 Covad and BellSouth shall continue to work together collaboratively to develop systems and processes for provisioning the High Frequency Spectrum in various real life scenarios. BellSouth and Covad agree that Covad is entitled to purchase the High Frequency Spectrum on a loop that is provisioned over fiber-fed digital loop carrier. BellSouth will provide Covad with access to feeder sub-loops at UNE prices. BellSouth and Covad will work together to establish methods and procedures for providing Covad access to the High Frequency Spectrum over fiber fed digital loop carriers.
- 2.11.2.9 Only one competitive local exchange carrier shall be permitted access to the High Frequency Spectrum of any particular loop.

- 2.11.2.10 To order High Frequency Spectrum on a particular loop, Covad must have a DSLAM collocated in the central office that serves the end-user of such loop. BellSouth shall allow Covad to order splitters in central offices where Covad is in the process of obtaining collocation space. BellSouth shall install such splitters before the end of Covad's collocation provisioning interval.
- 2.11.2.11 BellSouth will devise a splitter order form that allows Covad to order splitter ports in increments of 8, 24 or 96 ports.
- 2.11.2.12 BellSouth will provide Covad the Local Service Request ("LSR") format to be used when ordering the High Frequency Spectrum.
- 2.11.2.13 BellSouth will provide Covad with access to the High Frequency Spectrum of the unbundled loop as follows:

For 1-5 lines at the same address within three (3) business days from BellSouth's issuance of a FOC; 6-10 lines at the same address within 5 business days from BellSouth's issuance of a FOC; and more than 10 lines at the same address is to be negotiated.

For manual orders, BellSouth will return a Firm Order Confirmation (FOC) in no more than twenty-four (24) business hours. For electronic orders, BellSouth will return a FOC in one (1) hour ninety-five percent (95%) of the time for orders that flow-through. For orders that do not flow-through, BellSouth will return a FOC in twenty-four (24) business hours.

- 2.11.2.14 BellSouth shall perform testing to confirm that all in place splitters are correctly installed to the BellSouth frame. In the event any splitters are not correctly cabled or installed shall be corrected before February 28, 2001. BellSouth shall include testing to ensure splitters are correctly installed and cabled to the BellSouth frame as a part of the splitter installation process. If BellSouth informs Covad that a splitter has been installed for Covad's use, and that splitter is later found to have been incorrectly installed, BellSouth shall waive the nonrecurring charge for that splitter installation.
- 2.11.2.15 BellSouth shall test the data portion of the loop to insure the continuity of the wiring for Covad's data using the LSVT test-set for both the provisioning and maintenance of a loop. This test shall be performed from the Covad designated tie cable pair (which is connected to Covad's DSLAM) to the Main Distribution Frame (MDF) where the customer's cable pair leaves the BellSouth central office. This process will be implemented unless, and until, Covad and BellSouth mutually agree on another process. If BellSouth delivers a line shared loop that is not properly wired by

BellSouth, BellSouth shall adjust the monthly recurring charge to reflect the day that the line shared loop was placed in service.

2.11.3 MAINTENANCE AND REPAIR

- 2.11.3.1 Covad shall have access, for test, repair, and maintenance purposes, to any loop as to which it has access to the High Frequency Spectrum. Covad may access the loop at the point where the combined voice and data signal exits the central office splitter.
- 2.11.3.2 BellSouth will be responsible for repairing voice services and the physical line between the network interface device at the customer premise and the Termination Point of demarcation in the central office. Covad will be responsible for repairing data services. Each Party will be responsible for maintaining its own equipment.
- 2.11.3.3 If the problem encountered appears to impact primarily the xDSL service, the end user should call Covad. If the problem impacts primarily the voice service, the end user should call BellSouth. If both services are impaired, the end user should contact BellSouth and Covad.
- 2.11.3.4 BellSouth and Covad will work together to diagnose and resolve any troubles reported by the end-user and to develop a process for repair of lines as to which Covad has access to the High Frequency Spectrum. The Parties will continue to work together to address customer initiated repair requests and other customer impacting maintenance issues to better support unbundling of High Frequency Spectrum.
 - 2.11.3.4.1 The Parties will be responsible for testing and isolating troubles on its respective portion of the loop. Once a Party ("Reporting Party") has isolated a trouble to the other Party's ("Repairing Party") portion of the loop, the Reporting Party will notify the end user to report the trouble to the other service provider. The Repairing Party will take the actions necessary to repair the loop if it determines a trouble exists in its portion of the loop.
 - 2.11.3.4.2 If a trouble is reported on either Party's portion of the loop and no trouble actually exists, the Repairing Party may charge the Reporting Party for any dispatching and testing (both inside and outside the central office) required by the Repairing Party in order to confirm the loop's working status.
- 2.11.3.5 In the event Covad's deployment of xDSL on the High Frequency Spectrum significantly degrades the performance of other advanced services or of BellSouth's voice service on the same loop, BellSouth shall notify Covad and allow twenty-four (24) hours to cure the trouble. If Covad fails to resolve the trouble, BellSouth may discontinue Covad's access to the High Frequency Spectrum on such loop.

2.11.4 PRICING

~~2.11.4.1 BellSouth and Covad agree to the negotiated, interim rates for the High Frequency Spectrum. All interim prices will be subject to true up based on either mutually agreed to permanent pricing or permanent pricing established in a line sharing cost proceeding conducted by state public utility commissions. In the event interim prices are established by state public utility commissions before permanent prices are established, either through arbitration or some other mechanism, the interim prices established in this Agreement will be changed to reflect the interim prices mandated by the state public utility commissions; however, no true up will be performed until mutually agreed to permanent prices are established or permanent prices are established by state public utility commissions.~~

2.11.4.1 Line Sharing arrangements in service as of October 1, 2003, will be grandfathered until the earlier of the date the End User discontinues or moves service with Covad. Grandfathered arrangements pursuant to this Section will be billed at the revised line sharing rates set forth in Exhibit C.

2.11.4.2 For the period from October 2, 2003, through October 1, 2004, Covad may request new Line Sharing arrangements. For Line Sharing arrangements placed in service between October 2, 2003, and October 1, 2004, the rates will be as set forth in the revised line sharing rates in Exhibit C. After October 1, 2004, Covad may not request new Line Sharing arrangements under the terms of this Agreement.

2.11.4.3 The rates set forth herein will be applied retroactively back to the date set forth in the Triennial Review Order.

2.11.4.4 As of the earlier of October 2, 2006, or the date that the End User discontinues or moves service with Covad, all Line Sharing arrangements shall be terminated.

~~2.11.4.2.11 4.5~~ 2.11.4.5 BellSouth and Covad enter into this Agreement without waiving current or future relevant legal rights and without prejudicing any position BellSouth or Covad may take on relevant issues before state or federal regulatory or legislative bodies or courts of competent jurisdiction. This clause specifically contemplates but is not limited to: (a) the positions BellSouth or Covad may take in any cost docket related to the terms and conditions associated with access to the High Frequency Spectrum; and (b) the positions that BellSouth or Covad might take before the FCC or any state public utility commission related to the terms and conditions under which BellSouth must provide Covad with access to the High Frequency Spectrum. ~~The interim rates set forth in Exhibit C were adopted as a result of a compromise between the parties and do not reflect either party's position as to final rates for access to the High Frequency Spectrum.~~

Any element necessary for interconnection that is not identified above is priced as currently set forth in the Agreement.

3. Switching

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of local and tandem switching.

3.1 Local Switching

BellSouth shall provide non-discriminatory access to local circuit switching capability, and local tandem switching capability, on an unbundled basis, except as set forth below in Section 3.1.3 to Covad for the provision of a telecommunications service. BellSouth shall provide non-discriminatory access to packet switching capability on an unbundled basis to Covad for the provision of a telecommunications service only in the limited circumstance described below in Section 3.3.4.6.

3.1.1. Except as otherwise provided herein, BellSouth shall not impose any restrictions on Covad regarding the use of Switching Capabilities purchased from BellSouth provided such use does not result in demonstrable harm to either the BellSouth network or personnel or the use of the BellSouth network by BellSouth or any other telecommunication carrier.

3.1.2. Local Circuit Switching Capability, including Tandem Switching Capability

3.1.2.1 Definition

Local Circuit Switching Capability is defined as: (A) line-side facilities, which include, but are not limited to, the connection between a loop termination at a main distribution frame and a switch line card; (B) trunk-side facilities, which include, but are not limited to, the connection between trunk termination at a trunk-side cross-connect panel and a switch trunk card; and (C) All features, functions, and capabilities of the switch, which include, but are not limited to: (1) the basic switching function of connecting lines to lines, line to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to BellSouth's customers, such as a telephone number, white page listings, and dial tone; and (2) all other features that the switch is capable of providing, including but not limited to customer calling, customer local area signaling service features, and Centrex, as well as any technically feasible customized routing functions provided by the switch; (D) switching provided by remote switching modules.

3.1.2.2 When utilizing BellSouth's local circuit switching capability, local traffic shall be defined as set forth in Part B of the General Terms and Conditions.

- 3.1.3 Notwithstanding BellSouth's general duty to unbundle local circuit switching, BellSouth shall not be required to unbundle local circuit switching for Covad when Covad serves end-users with four (4) or more voice-grade (DS-0) equivalents or lines in locations served by BellSouth's local circuit switches, which are in the following MSAs: Atlanta, GA; Miami, FL; Orlando, FL; Ft. Lauderdale, FL; Charlotte-Gastonia-Rock Hill, NC; Greensboro-Winston Salem-High Point, NC; Nashville, TN; and New Orleans, LA, and BellSouth has provided non-discriminatory cost based access to the Enhanced Extended Link (EEL) throughout Density Zone 1 as determined by NECA Tariff No. 4 as in effect on January 1, 1999.
- 3.1.4 In the event that Covad orders local circuit switching for a single end user account name at a single physical end user location with four (4) or more two (2) wire voice-grade loops from a BellSouth central office listed on Exhibit A, BellSouth's sole recourse shall be to charge Covad a rate to be negotiated for use of the local circuit switching functionality for the affected facilities, or in the alternative, to charge Covad the local services resale rate for use of all Combinations used to provide the affected facilities to Covad.
- 3.1.5 A featureless port is one that has a line port, switching facilities, and an interoffice port. A featured port is a port that includes all features then capable or a number of then capable features specifically requested by Covad. Any features that are not currently then capable but are technically feasible through the switch can be requested through the BFR process.
- 3.1.6 BellSouth will provide to Covad customized routing of calls: (i) to a requested directory assistance services platform; (ii) to an operator services platform pursuant to Section 10 of Attachment 2; (iii) for Covad's PIC'ed toll traffic in a two (2) PIC environment to an alternative OS/DA platform designated by Covad. Covad customers may use the same dialing arrangements as BellSouth customers.
- 3.1.7 Remote Switching Module functionality is included in Switching Capability. The switching capabilities used will be based on the line side features they support.
- 3.1.8 Switching Capability will also be capable of routing local, intraLATA, interLATA, and calls to international customer's preferred carrier; call features (e.g. call forwarding) and Centrex capabilities.
- 3.1.9 Where required to do so in order to comply with an effective Commission order, BellSouth will provide to Covad purchasing local BellSouth switching and reselling BellSouth local exchange service under Attachment 1, selective routing of calls to a requested directory assistance services platform or operator services platform. Covad customers may use the same dialing arrangements as BellSouth customers, but obtain a Covad branded service.

3.2 Technical Requirements

- 3.2.1 The requirements set forth in this Section apply to Local Switching, but not to the Data Switching function of Local Switching.
 - 3.2.1.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in the applicable industry standard technical references.
 - 3.2.1.2 When applicable, BellSouth shall route calls to the appropriate trunk or lines for call origination or termination.
 - 3.2.1.3 Subject to this section, BellSouth shall route calls on a per line or per screening class basis to (1) BellSouth platforms providing Network Elements or additional requirements (2) Operator Services platforms, (3) Directory Assistance platforms, and (4) Repair Centers. Any other routing requests by Covad will be made pursuant to the Bona Fide Request/ New Business Request Process as set forth in General Terms and Conditions.
 - 3.2.1.4 BellSouth shall provide unbranded recorded announcements and call progress tones to alert callers of call progress and disposition.
 - 3.2.1.5 BellSouth shall activate service for a Covad customer or network interconnection on any of the Local Switching interfaces. This includes provisioning changes to change a customer from BellSouth's services to Covad's services without loss of switch feature functionality as defined in this Agreement.
 - 3.2.1.6 BellSouth shall perform routine testing (e.g., Mechanized Loop Tests (MLT) and test calls such as 105, 107 and 108 type calls) and fault isolation on a mutually agreed upon schedule.
 - 3.2.1.7 BellSouth shall repair and restore any equipment or any other maintainable component that may adversely impact Local Switching.
 - 3.2.1.8 BellSouth shall control congestion points such as those caused by radio station call-ins, and network routing abnormalities. All traffic shall be restricted in a non-discriminatory manner.
 - 3.2.1.9 BellSouth shall perform manual call trace and permit customer originated call trace.
 - 3.2.1.10 Special Services provided by BellSouth will include the following:
 - 3.2.1.10.1 Telephone Service Prioritization;
 - 3.2.1.10.2 Related services for handicapped;

- 3.2.1.10.3 Soft dial tone where required by law; and
- 3.2.1.10.4 Any other service required by law.
- 3.2.1.11 BellSouth shall provide Switching Service Point (SSP) capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch (STPS). These capabilities shall adhere to the technical specifications set forth in the applicable industry standard technical references.
- 3.2.1.12 BellSouth shall provide interfaces to adjuncts through Telcordia (formerly BellCore) standard interfaces. These adjuncts can include, but are not limited to, the Service Circuit Node and Automatic Call Distributors.
- 3.2.1.13 BellSouth shall provide performance data regarding a customer line, traffic characteristics or other measurable elements to Covad, upon a reasonable request from Covad. CLEC will pay BellSouth for all costs incurred to provide such performance data through the Business Opportunity Request process.
- 3.2.1.14 BellSouth shall offer Local Switching that provides feature offerings at parity to those provided by BellSouth to itself or any other Party. Such feature offerings shall include but are not limited to:
 - 3.2.1.14.1 Basic and primary rate ISDN;
 - 3.2.1.14.2 Residential features;
 - 3.2.1.14.3 Customer Local Area Signaling Services (CLASS/LASS);
 - 3.2.1.14.4 CENTREX (including equivalent administrative capabilities, such as customer accessible reconfiguration and detailed message recording); and
 - 3.2.1.14.5 Advanced intelligent network triggers supporting Covad and BellSouth service applications.
- 3.2.2 BellSouth shall offer to Covad all AIN triggers in connection with its SMS/SCE offering which are supported by BellSouth for offering AIN-based services. Triggers that are currently available are:
 - 3.2.2.1 Off-Hook Immediate
 - 3.2.2.2 Off-Hook Delay
 - 3.2.2.3 Termination Attempt
 - 3.2.2.4 6/10 Public Office Dialing Plan

- 3.2.2.5 Feature Code Dialing
- 3.2.2.6 Customer Dialing Plan
- 3.2.3 When the following triggers are supported by BellSouth, BellSouth will make these triggers available to Covad:
 - 3.2.3.1 Private EAMF Trunk
 - 3.2.3.2 Shared Interoffice Trunk (EAMF, SS7)
 - 3.2.3.3 N11
 - 3.2.3.4 Automatic Route Selection
- 3.2.4 Where capacity exists, BellSouth shall assign each Covad customer line the class of service designated by Covad (e.g., using line class codes or other switch specific provisioning methods), and shall route directory assistance calls from Covad customers to Covad directory assistance operators at Covad's option.
- 3.2.5 Where capacity exists, BellSouth shall assign each Covad customer line the class of services designated by Covad (e.g., using line class codes or other switch specific provisioning methods) and shall route operator calls from Covad customers to Covad operators at Covad's option. For example, BellSouth may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to a Covad Operator Services Position System (OSPS). Calls from Local Switching must pass the ANI-II digits unchanged.
- 3.2.6 Local Switching shall be offered in accordance with the technical specifications set forth in the applicable industry standard references.
- 3.2.7 Interface Requirements
 - 3.2.7.1 BellSouth shall provide the following interfaces to loops:
 - 3.2.7.1.1 Standard Tip/Ring interface including loop start or ground start, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);
 - 3.2.7.1.2 Coin phone signaling;
 - 3.2.7.1.3 Basic Rate Interface ISDN adhering to appropriate Telcordia (formerly BellCore) Technical Requirements;
 - 3.2.7.1.4 Two-wire analog interface to PBX;

- 3.2.7.1.5 Four-wire analog interface to PBX;
- 3.2.7.1.6 Four-wire DS1 interface to PBX or customer provided equipment (e.g. computers and voice response systems);
- 3.2.7.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Telcordia (formerly BellCore) Technical Requirements;
- 3.2.7.1.8 Switched Fractional DS1 with capabilities to configure Nx64 channels (where N = 1 to 24); and
- 3.2.7.1.9 Loops adhering to Telcordia (formerly BellCore) TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.
- 3.2.7.2 BellSouth shall provide access to the following but not limited to:
 - 3.2.7.2.1 SS7 Signaling Network or Multi-Frequency trunking if requested by Covad;
 - 3.2.7.2.2 Interface to Covad operator services systems or Operator Services through appropriate trunk interconnections for the system; and
 - 3.2.7.2.3 Interface to Covad Directory Assistance Services through the Covad switched network or to Directory Assistance Services through the appropriate trunk interconnections for the system; and 950 access or other Covad required access to interexchange carriers as requested through appropriate trunk interfaces.

3.3 Tandem Switching

3.3.1 Definition

Tandem Switching is the function that establishes a communications path between two switching offices through a third switching office (the Tandem switch).

3.3.2 Technical Requirements

- 3.3.2.1 Tandem Switching shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, 6/1/90. The requirements for Tandem Switching include, but are not limited to the following:
 - 3.3.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;
 - 3.3.2.1.2 Tandem Switching will provide screening as jointly agreed to by Covad and BellSouth;

- 3.3.2.1.3 Tandem Switching shall provide Advanced Intelligent Network triggers supporting AIN features where such routing is not available from the originating end office switch, to the extent such Tandem switch has such capability;
- 3.3.2.1.4 Tandem Switching shall provide access to Toll Free number portability database as designated by Covad;
- 3.3.2.1.5 Tandem Switching shall provide all trunk interconnections discussed under the "Network Interconnection" section (e.g., SS7, MF, DTMF, DialPulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));
 - 3.3.2.1.5.1 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and
 - 3.3.2.1.5.2 Where appropriate, Tandem Switching shall provide connectivity to transit traffic to and from other carriers.
- 3.3.2.1.6 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IXC's, ICO's, CAP's and CLEC switches.
- 3.3.2.1.7 Tandem Switching shall provide local tandeming functionality between two end offices including two offices belonging to different CLEC's (e.g., between a CLEC end office and the end office of another CLEC).
- 3.3.2.1.8 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed.
- 3.3.2.1.9 Tandem Switching shall record billable events and send them to the area billing centers designated by Covad. Tandem Switching will provide recording of all billable events as jointly agreed to by Covad and BellSouth.
- 3.3.2.1.10 Upon a reasonable request from Covad, BellSouth shall perform routine testing and fault isolation on the underlying switch that is providing Tandem Switching and all its interconnections. The results and reports of the testing shall be made immediately available to Covad.
- 3.3.2.1.11 BellSouth shall maintain Covad's trunks and interconnections associated with Tandem Switching at least at parity to its own trunks and interconnections.
- 3.3.2.1.12 BellSouth shall control congestion points and network abnormalities. All traffic will be restricted in a non-discriminatory manner.
- 3.3.2.1.13 Selective Call Routing through the use of line class codes is not available through the use of tandem switching. Selective Call Routing through the use of line class codes is

an end office capability only. Detailed primary and overflow routing plans for all interfaces available within BellSouth's switching network shall be mutually agreed to by Covad and BellSouth.

3.3.2.1.14 Tandem Switching shall process originating toll-free traffic received from Covad's local switch.

3.3.2.1.15 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element, to the extent such Tandem Switch has such capability.

3.3.2.2 Interface Requirements

3.3.2.2.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

3.3.2.2.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which BellSouth interconnects.

3.3.2.2.3 BellSouth shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.

3.3.2.2.4 Tandem Switching shall interconnect with Covad's switch, using two-way trunks, for traffic that is transiting via BellSouth's network to interLATA or intraLATA carriers. At Covad's request, Tandem Switching shall record and keep records of traffic for billing.

3.3.2.2.5 Tandem Switching shall provide an alternate final routing pattern for Covad's traffic overflowing from direct end office high usage trunk groups.

3.3.2.2.6 Tandem Switching shall be equal or better than the requirements for Tandem Switching set forth in the applicable technical references.

3.4 AIN Selective Carrier Routing for Operator Services, Directory Assistance and Repair Centers

3.4.1 BellSouth will provide AIN Selective Carrier Routing at the request of Covad. AIN Selective Carrier Routing will provide Covad with the capability of routing operator calls, 0+ and 0- and 0+ NPA (LNPA) 555-1212 directory assistance, 1+411 directory assistance and 611 repair center calls to pre-selected destinations.

- 3.4.2 Covad shall order AIN Selective Carrier Routing through its Account Team. AIN Selective Carrier Routing must first be established regionally and then on a per central office, per state basis.
- 3.4.3 AIN Selective Carrier Routing is not available in DMS 10 switches.
- 3.4.4 Where AIN Selective Carrier Routing is utilized by Covad, the routing of Covad's end user calls shall be pursuant to information provided by Covad and stored in BellSouth's AIN Selective Carrier Routing Service Control Point database. AIN Selective Carrier Routing shall utilize a set of Line Class Codes (LCCs) unique to a basic class of service assigned on an 'as needed basis. The same LCCs will be assigned in each central office where AIN Selective Carrier Routing is established.
- 3.4.5 Upon ordering of AIN Selective Carrier Routing Regional Service, Covad shall remit to BellSouth the Regional Service Order non-recurring charges set forth in Exhibit A of this Attachment. There shall be a non-recurring End Office Establishment Charge per office due at the addition of each central office where AIN Selective Carrier Routing will be utilized. Said non-recurring charge shall be as set forth in Exhibit A of this Attachment. For each Covad end user activated, there shall be a non-recurring End User Establishment charge as set forth in Exhibit A of this Attachment, payable to BellSouth pursuant to the terms of the General Terms and Conditions, incorporated herein by this reference. Covad shall pay the AIN Selective Carrier Routing Per Query Charge set forth in Exhibit A of this Attachment.
- 3.4.6 This Regional Service Order non-recurring charge will be non-refundable and will be paid with 1/2 coming up-front with the submission of all fully completed required forms, including: Regional Selective Carrier Routing (SCR) Order Request-Form A, Central Office AIN Selective Carrier Routing (SCR) Order Request - Form B, AIN_SCR Central Office Identification Form - Form C, AIN_SCR Routing Options Selection Form - Form D, and Routing Combinations Table - Form E. BellSouth has 30 days to respond to the client's fully completed firm order as a Regional Service Order. With the delivery of this firm order response to the client, BellSouth considers that the delivery schedule of this service commences. The remaining 1/2 of the Regional Service Order payment must be paid when at least 90% of the Central Offices listed on the original order have been turned up for the service.
- 3.4.7 The non-recurring End Office Establishment Charge will be billed to the client following our normal monthly billing cycle for this type of order.
- 3.4.8 End-User Establishment Orders will not be turned-up until the 2nd payment is received for the Regional Service Order. The non-recurring End-User Establishment Charges will be billed to the client following our normal monthly billing cycle for this type of order.

- 3.4.9 Additionally, the AIN Selective Carrier Routing Per Query Charge will be billed to the client following the normal billing cycle for per query charges.
- 3.4.10 All other network components needed, for example, unbundled switching and unbundled local transport, etc, will be billed according per contracted rates.

~~3.5 Packet Switching Capability~~

~~3.5.1 Definition~~

~~Packet Switching Capability. The packet switching capability network element is defined as the basic packet switching function of routing or forwarding packets, frames, cells or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by Digital Subscriber Line Access Multiplexers, including but not limited to:~~

- ~~3.5.2 The ability to terminate copper customer loops (which includes both a low band voice channel and a high band data channel, or solely a data channel).~~
- ~~3.5.3 The ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches.~~
- ~~3.5.4 The ability to extract data units from the data channels on the loops, and~~
- ~~3.5.5 The ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.~~
- ~~3.5.6 BellSouth shall be required to provide non-discriminatory access to unbundled packet switching capability only where each of the following conditions are satisfied.~~
- ~~3.5.6.1 BellSouth has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems, or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section (e.g., end office to remote terminal, pedestal or environmentally controlled vault);~~
- ~~3.5.6.2 There are no spare copper loops capable of supporting the xDSL services Covad seeks to offer;~~
- ~~3.5.6.3 BellSouth has not permitted Covad to deploy a Digital Subscriber Line Access Multiplexer at the remote terminal, pedestal or environmentally controlled vault or other interconnection point as defined in Section 2 of the Remote Site Collocation Attachment, nor has the Covad obtained a virtual collocation arrangement at these subloop interconnection points as defined by 47 C.F.R. § 51.319 (b); and~~

~~3.5.6.4 BellSouth has deployed packet switching capability for its own use.~~

~~3.5.7 If there is a dispute as to whether BellSouth must provide Packet Switching, such dispute will be resolved according to the dispute resolution process set forth in Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by this reference.~~

3.6 Interoffice Transmission Facilities

BellSouth shall provide nondiscriminatory access, in accordance with FCC Rule 51.311 and Section 251(c)(3) of the Act, to interoffice transmission facilities on an unbundled basis to Covad for the provision of a telecommunications service.

3.7 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

3.8 Operational Support Systems (OSS)

The terms, conditions and rates for OSS are as set forth in Section 2.9 of this Attachment.

4. Unbundled Network Element Combinations

4.1 Unbundled Network Element Combinations shall include: 1) Enhanced Extended Links (EELs) 2) Other Non-Switched Transport Combinations 3) UNE Loop/Special Access Combinations and 4) UNE Loop/Port Combinations.

4.2 For purposes of this Section, references to "Currently Combined" network elements shall mean that such network elements are in fact already combined by BellSouth in the BellSouth network to provide service to a particular end user at a particular location.

4.3 Enhanced Extended Links (EELs)

4.3.1 Where facilities permit and where necessary to comply with an effective FCC and/or State Commission order, or as otherwise mutually agreed by the Parties, BellSouth shall offer access to loop and transport combinations, also known as the Enhanced Extended Link ("EEL") as defined in Section 4.3.2 below.

4.3.2 Subject to Section 4.3.4 below, BellSouth will provide access to the EEL in the combinations set forth in Section 4.3.5 following. Covad shall provide to BellSouth a

letter certifying that Covad is providing a significant amount of local exchange service (as described in Sections 4.3.8.1.1, 4.3.8.1.2, 4.3.8.1.3 or 4.3.8.2) over such combinations. This offering is intended to provide connectivity from an end user's location through that end user's SWC to Covad's POP serving wire center. The circuit must be connected to Covad's switch for the purpose of provisioning telephone exchange service to Covad's end-user customers. The EEL will be connected to Covad's facilities in Covad's collocation space at the POP SWC, or Covad may purchase BellSouth's access facilities between Covad's POP and Covad's collocation space at the POP SWC.

- 4.3.3 When ordering EEL combinations, Covad shall provide to BellSouth a letter certifying that Covad will provide a significant amount of local exchange service over the requested combination, as described in Section 4.3.6 below, and shall indicated under what local usage option Covad seeks to qualify. Covad shall be deemed to be providing a significant amount of local exchange service if one of the three (3) options set forth in Sections 4.3.8.1.1 through 4.3.8.1.3 is met. BellSouth shall have the right to audit Covad's records to verify that Covad is meeting the applicable local usage requirements. Such audit shall comply with the terms of Section 4.3.8.3 of this Attachment.
- 4.3.4 BellSouth shall provide EEL combinations to Covad in Georgia, Kentucky, Louisiana, Mississippi and Tennessee regardless of whether or not such EELs are Currently Combined. In all other states, BellSouth shall make available to Covad those EEL combinations described in Section 4.3.5 below only to the extent such combinations are Currently Combined. Furthermore, BellSouth will make available EEL combinations to Covad in density Zone 1, as defined in 47 C.F.R. 69.123 as of January 1, 1999, in the Atlanta, GA; Miami, FL; Orlando, FL; Ft. Lauderdale, FL; Charlotte-Gastonia-Rock Hill, NC; Greensboro-Winston Salem-High Point, NC; Nashville, TN; and New Orleans, LA, MSAs regardless of whether or not such EELs are Currently Combined. Except as stated above, EELs will be provided to Covad only to the extent such network elements are Currently Combined.
- 4.3.5 EEL Combinations
 - 4.3.5.1 DS1 Interoffice Channel + DS1 Channelization + 2-wire VG Local Loop
 - 4.3.5.2 DS1 Interoffice Channel + DS1 Channelization + 4-wire VG Local Loop
 - 4.3.5.3 DS1 Interoffice Channel + DS1 Channelization + 2-wire ISDN Local Loop
 - 4.3.5.4 DS1 Interoffice Channel + DS1 Channelization + 4-wire 56 kbps Local Loop
 - 4.3.5.5 DS1 Interoffice Channel + DS1 Channelization + 4-wire 64 kbps Local Loop

- 4.3.5.6 DS1 Interoffice Channel + DS1 Local Loop
- 4.3.5.7 DS3 Interoffice Channel + DS3 Local Loop
- 4.3.5.8 STS-1 Interoffice Channel + STS-1 Local Loop
- 4.3.5.9 DS3 Interoffice Channel + DS3 Channelization + DS1 Local Loop
- 4.3.5.10 STS-1 Interoffice Channel + DS3 Channelization + DS1 Local Loop
- 4.3.5.11 2-wire VG Interoffice Channel + 2-wire VG Local Loop
- 4.3.5.12 4-wire VG Interoffice Channel + 4-wire VG Local Loop
- 4.3.5.13 4-wire 56 kbps Interoffice Channel + 4-wire 56 kbps Local Loop
- 4.3.5.14 4-wire 64 kbps Interoffice Channel + 4-wire 64 kbps Local Loop
- 4.3.6 To order EELs Covad must meet the requirements in Section 4.3.8.1.1 or 4.3.8.1.2.

4.3.7 Special Access Service Conversions

- 4.3.7.1 Covad may not convert special access services to combinations of loop and transport network elements, whether or not Covad self-provides its entrance facilities (or obtains entrance facilities from a third party), unless Covad uses the combination to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer. To the extent Covad requests to convert any special access services to combinations of loop and transport network elements at UNE prices, Covad shall provide to BellSouth a letter certifying that Covad is providing a significant amount of local exchange service (as described in this Section) over such combinations. The certification letter shall also indicate under what local usage option Covad seeks to qualify for conversion of special access circuits. Covad shall be deemed to be providing a significant amount of local exchange service over such combinations if one of the following options is met:
 - 4.3.7.1.1 Covad certifies that it is the exclusive provider of an end user's local exchange service. The loop-transport combinations must terminate at Covad's collocation arrangement in at least one BellSouth central office. This option does not allow loop-transport combinations to be connected to BellSouth's tariffed services. Under this option, Covad is the end user's only local service provider, and thus, is providing more than a significant amount of local exchange service. Covad can then use the loop-transport combinations that serve the end user to carry any type of traffic, including using them to carry 100 percent interstate access traffic; or

- 4.3.7.1.2 Covad certifies that it provides local exchange and exchange access service to the end user customer's premises and handles at least one third of the end user customer's local traffic measured as a percent of total end user customer local dialtone lines; and for DS1 circuits and above, at least 50 percent of the activated channels on the loop portion of the loop-transport combination have at least 5 percent local voice traffic individually, and the entire loop facility has at least 10 percent local voice traffic. When a loop-transport combination includes multiplexing, each of the individual DS1 circuits must meet this criteria. The loop-transport combination must terminate at Covad's collocation arrangement in at least one BellSouth central office. This option does not allow loop-transport combinations to be connected to BellSouth tariffed services; or
- 4.3.7.1.3 Covad certifies that at least 50 percent of the activated channels on a circuit are used to provide originating and terminating local dialtone service and at least 50 percent of the traffic on each of these local dialtone channels is local voice traffic, and that the entire loop facility has at least 33 percent local voice traffic. When a loop-transport combination includes multiplexing, each of the individual DS1 circuits must meet this criteria. This option does not allow loop-transport combinations to be connected to BellSouth's tariffed services. Under this option, collocation is not required. Covad does not need to provide a defined portion of the end user's local service, but the active channels on any loop-transport combination, and the entire facility, must carry the amount of local exchange traffic specified in this option.
- 4.3.7.2 In addition, there may be extraordinary circumstances where Covad is providing a significant amount of local exchange service, but does not qualify under any of the three options set forth in Section 4.3.8. In such case, Covad may petition the FCC for a waiver of the local usage options set forth in the June 2, 2000 Order. If a waiver is granted, then upon Covad's request the Parties shall amend this Agreement to the extent necessary to incorporate the terms of such waiver for such extraordinary circumstance.
- 4.3.7.3 BellSouth may at its sole discretion audit Covad records in order to verify the type of traffic being transmitted over combinations of loop and transport network elements. The audit shall be conducted by a third party independent auditor, and Covad shall be given thirty days written notice of scheduled audit. Such audit shall occur no more than one time in a calendar year, unless results of an audit find noncompliance with the significant amount of local exchange service requirement. In the event of noncompliance, Covad shall reimburse BellSouth for the cost of the audit. If, based on its audits, BellSouth concludes that Covad is not providing a significant amount of local exchange traffic over the combinations of loop and transport network elements, BellSouth may file a complaint with the appropriate Commission, pursuant to the dispute resolution process as set forth in the Interconnection Agreement. In the event that BellSouth prevails, BellSouth may convert such combinations of loop and

transport network elements to special access services and may seek appropriate retroactive reimbursement from Covad.

- 4.3.7.4 Covad may convert special access circuits to combinations of loop and transport UNEs pursuant to the terms of this Section and subject to the termination provisions in the applicable special access tariffs, if any.

4.3.8 Rates

4.3.8.1 Georgia, Kentucky, Louisiana, Mississippi and Tennessee

- 4.3.8.2 The non-recurring and recurring rates for the EEL Combinations of network elements set forth in 4.3.4 whether Currently Combined or new, are as set forth in Exhibit C of this Attachment.

- 4.3.8.3 For combinations of loop and transport network elements not set forth in Section 4.3.5, where the elements are not Currently Combined but are ordinarily combined in BellSouth's network, the non-recurring and recurring charges for such UNE combinations shall be the sum of the stand-alone non-recurring and recurring charges of the network elements which make up the combination.

- 4.3.8.4 To the extent that Covad seeks to obtain other combinations of network elements that BellSouth ordinarily combines in its network which have not been specifically priced by the Commission when purchased in combined form, Covad, at its option, can request that such rates be determined pursuant to the Bona Fide Request/New Business Request (NBR) process set forth in this Agreement.

4.3.8.5 All Other States

- 4.3.8.5.1 Subject to the preceding sections, for all other states, the non-recurring and recurring rates for the Currently Combined EEL combinations set forth in Section 4.3.5 and other Currently Combined network elements will be the sum of the recurring rates for the individual network elements plus a non recurring charge set forth in Exhibit C of this Attachment.

4.3.8.6 Multiplexing

- 4.3.8.6.1 Where multiplexing functionality is required in connection with loop and transport combinations, such multiplexing will be provided at the rates and on the terms set forth in this Agreement.

4.4 Other Non-Switched Combinations

- 4.4.1 In the state of Georgia, Kentucky, Louisiana, Mississippi and Tennessee, BellSouth shall make available to Covad, in accordance with Section 4.4.2.1 below: (1)

combinations of network elements other than EELs that are Currently Combined; and (2) combinations of network elements other than EELs that are not Currently Combined but that BellSouth ordinarily combines in its network. In all other states, BellSouth shall make available to Covad, in accordance with Section 4.4.2.2 below, combinations of network elements other than EELs only to the extent such combinations are Currently Combined.

4.4.2 Rates

4.4.2.1 Georgia, Kentucky, Louisiana, Mississippi and Tennessee

4.4.2.1.1 The non-recurring and recurring rates for Other Network Element combinations, whether Currently Combined or new, are as set forth in Exhibit C of this Attachment.

4.4.2.1.2 For Other Network Element combinations where the elements are not Currently Combined but are ordinarily combined in BellSouth's network, the non-recurring and recurring charges for such UNE combinations shall be the sum of the stand-alone non-recurring and recurring charges of the network elements that make up the combination.

4.4.2.1.3 To the extent that Covad seeks to obtain other combinations of network elements that BellSouth ordinarily combines in its network which have not been specifically priced by the Commission when purchased in combined form, Covad, at its option, can request that such rates be determined pursuant to the Bona Fide Request/New Business Request (NBR) process set forth in this Agreement.

4.4.2.2 All Other States

4.4.2.2.1 For all other states, the non-recurring and recurring rates for the Other Network Element Combinations that are Currently Combined will be the sum of the recurring rates for the individual network elements plus a non-recurring charge set forth in Exhibit C of this Attachment.

4.5 UNE Loop/Special Access Combinations

4.5.1 Additionally, BellSouth shall make available to Covad a new combination of an unbundled loop and tariffed special access interoffice facilities. To the extent Covad will require multiplexing functionality in connection with such combination, BellSouth will provide access to multiplexing within the central office pursuant to the terms, conditions and rates set forth in its Access Services Tariffs. The tariffed special access interoffice facilities and any associated tariffed services, including but not limited to multiplexing, shall not be eligible for conversion to UNEs as described in Section 4.3.8.

4.5.2 Rates

- 4.5.2.1 The non-recurring and recurring rates for UNE/Special Access Combinations will be the sum of the unbundled loop rates as set forth in Exhibit C and the interoffice transport rates and multiplexing rates as set forth in the Access Services Tariff.

5. Port/Loop Combinations

- 5.1 Combinations of port and loop unbundled network elements along with switching and transport unbundled network elements provide local exchange service for the origination or termination of calls. Port/ loop combinations support the same local calling and feature requirements as described in the Unbundled Local Switching or Port section of this Attachment 2 and the ability to presubscribe to a primary carrier for intraLATA and/or to presubscribe to a primary carrier for interLATA toll service.
- 5.2 BellSouth shall make available UNE port/loop combinations, regardless of whether such combinations are Currently Combined, so long as such combinations are ordinarily combined in BellSouth's network.
- 5.2.1 Except as set forth in section 5.3 below, in Georgia, Kentucky, Louisiana, Mississippi and Tennessee, BellSouth shall provide UNE port/loop combinations that are ordinarily combined in BellSouth's network, regardless of whether such combinations are Currently Combined at the cost-based rates in Exhibit C.
- 5.2.2 In Alabama, Florida, North Carolina and South Carolina, BellSouth shall provide UNE port/loop combinations that are not Currently Combined but that are ordinarily combined in BellSouth's network at the market rates in Exhibit C.
- 5.2.3 In Alabama, Florida, North Carolina and South Carolina, BellSouth shall provide UNE port/loop combinations that are Currently Combined at the cost-based rates in Exhibit C.
- 5.3 BellSouth is not required to provide combinations of port and loop network elements on an unbundled basis in locations where, pursuant to FCC rules, BellSouth is not required to provide circuit switching as an unbundled network element.
- 5.3.1 BellSouth shall not be required to provide local circuit switching as an unbundled network element in density Zone 1, as defined in 47 CFR 69.123 as of January 1, 1999 of the Atlanta, GA; Miami, FL; Orlando, FL; Ft. Lauderdale, FL; Charlotte-Gastonia-Rock Hill, NC; Greensboro-Winston Salem-High Point, NC; Nashville, TN; and New Orleans, LA, MSAs to Covad if Covad's customer has 4 or more DS0 equivalent lines.

5.3.2 Notwithstanding the foregoing, BellSouth shall provide combinations of port and loop network elements on an unbundled basis where, pursuant to FCC rules, BellSouth is not required to provide local circuit switching as an unbundled network element and shall do so at the market rates in Exhibit C.

5.6.3 Combination Offerings

5.6.3.1 2-wire voice grade port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.2 2-wire voice grade Coin port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.3 2-wire voice grade DID port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.4 2-wire CENTREX port, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.5 2-wire ISDN Basic Rate Interface, voice grade loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.6 4-wire ISDN Primary Rate Interface, DS1 loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.7 4-wire DS1 Trunk port, DS1 Loop, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

5.6.3.8 4-wire DS1 Loop with normal serving wire center channelization interface, 2-wire voice grade ports (PBX), 2-wire DID ports, unbundled end office switching, unbundled end office trunk port, common transport per mile per MOU, common transport facilities termination, tandem switching, and tandem trunk port.

6. Transport and Dark Fiber

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of unbundled transport and dark fiber.

6.1. **Transport**

6.1.1 Definition of Common (Shared) Transport

Common (Shared) Transport is an interoffice transmission path between two BellSouth end-offices, BellSouth end-office and a local tandem, or between two local tandems. Where BellSouth Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common (Shared) Transport. Common (Shared) Transport consists of BellSouth inter-office transport facilities and is unbundled from local switching.

6.1.2 Technical Requirements of Common (Shared) Transport

6.1.2.1 Common (Shared) Transport provided on DS1 or VT1.5 circuits, shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Central Office to Central Office ("CO to CO") connections in the appropriate industry standards.

6.1.2.2 Common (Shared) Transport provided on DS3 circuits, STS-1 circuits, and higher transmission bit rate circuits, shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for CO to CO connections in the appropriate industry standards.

6.1.2.3 BellSouth shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities that are used to provide Common (Shared) Transport.

6.1.2.4 At a minimum, Common (Shared) Transport shall meet all of the requirements set forth in the applicable industry standard technical references.

6.2 Interoffice transmission facility network elements include:

6.2.1 Dedicated transport, defined as BellSouth's transmission facilities, including all technically feasible capacity-related services including, but not limited to, DS1, DS3 and OCn levels, dedicated to a particular customer or carrier, that provide telecommunications between wire centers or switches owned by BellSouth, or between wire centers and switches owned by BellSouth and Covad.

6.2.2 Dark Fiber transport, defined as BellSouth's optical transmission facilities without attached multiplexing, aggregation or other electronics;

6.2.3 Shared transport, defined as transmission facilities shared by more than one carrier, including BellSouth, between end office switches, between end office switches and tandem switches, and between tandem switches, in BellSouth's network.

6.2.4 BellSouth shall:

- 6.2.4.1 Provide Covad exclusive use of interoffice transmission facilities dedicated to a particular customer or carrier, or shared use of the features, functions, and capabilities of interoffice transmission facilities shared by more than one customer or carrier;
 - 6.2.4.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that Covad could use to provide telecommunications services;
 - 6.2.4.3 Permit, to the extent technically feasible, Covad to connect such interoffice facilities to equipment designated by Covad, including but not limited to, Covad's collocated facilities; and
 - 6.2.4.4 Permit, to the extent technically feasible, Covad to obtain the functionality provided by BellSouth's digital cross-connect systems in the same manner that BellSouth provides such functionality to interexchange carriers.
- 6.2.5 Provided that the facility is used to transport a significant amount of local exchange services Covad shall be entitled to convert existing interoffice transmission facilities (i.e., special access) to the corresponding interoffice transport network element option.

6.3 Dedicated Transport

6.3.1 Definitions

- 6.3.2 Dedicated Transport is defined as BellSouth transmission facilities dedicated to a particular customer or carrier that provide telecommunications between wire centers owned by BellSouth or requesting telecommunications carriers, or between switches owned by BellSouth or requesting telecommunications carriers.

6.3.3 Unbundled Local Channel

- 6.3.4 Unbundled Local Channel is the dedicated transmission path between Covad's Point of Presence and the BellSouth Serving Wire Center's collocation.

6.3.5 Unbundled Interoffice Channel.

- 6.3.6 Unbundled Interoffice Channel is the dedicated transmission path that provides telecommunication between BellSouth's Serving Wire Centers' collocations.

- 6.3.7 BellSouth shall offer Dedicated Transport in each of the following ways:

- 6.3.7.1 As capacity on a shared UNE facility.
- 6.3.7.2 As a circuit (e.g., DS0, DS1, DS3) dedicated to Covad. This circuit shall consist of an Unbundled Local Channel or an Unbundled Interoffice Channel or both.

6.3.8 When Dedicated Transport is provided it shall include:

6.3.8.1 Transmission equipment such as, line terminating equipment, amplifiers, and regenerators;

6.3.8.2 Inter-office transmission facilities such as optical fiber, copper twisted pair, and coaxial cable.

6.3.9 Rates for Dedicated Transport are listed in this Attachment. For those states that do not contain rates in this Attachment the rates in the applicable State Access Tariff will apply as interim rates. When final rates are developed, these interim rates will be subject to true up, and the Parties will amend the Agreement to reflect the new rates.

6.3.10 Technical Requirements

6.3.10.1 This Section sets forth technical requirements for all Dedicated Transport.

6.3.10.2 When BellSouth provides Dedicated Transport, the entire designated transmission service (e.g., DS0, DS1, DS3) shall be dedicated to Covad designated traffic.

6.3.10.3 BellSouth shall offer Dedicated Transport in all technologies that become available including, but not limited to, (1) DS0, DS1 and DS3 transport services, and (2) SONET at available transmission bit rates.

6.3.10.4 For DS1 or VT1.5 circuits, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office ("CI to CO") connections in the appropriate industry standards.

6.3.10.5 Where applicable, for DS3, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for CI to CO connections in the appropriate industry standards.

6.3.10.6 BellSouth shall offer the following interface transmission rates for Dedicated Transport:

6.3.10.6.1 DS0 Equivalent;

6.3.10.6.2 DS1 (Extended SuperFrame - ESF);

6.3.10.6.3 DS3 (signal must be framed);

6.3.10.6.4 SDH (Synchronous Digital Hierarchy) Standard interface rates in accordance with International Telecommunications Union (ITU) Recommendation G.707 and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.

- 6.3.10.6.5 When Dedicated Transport is provided, BellSouth shall design it according to BellSouth's network infrastructure to allow for the termination points specified by Covad.
- 6.3.11 At a minimum, Dedicated Transport shall meet each of the requirements set forth in the applicable industry technical references.
 - 6.3.11.1 BellSouth Technical References:
 - 6.3.11.2 TR-TSY-000191 Alarm Indication Signals Requirements and Objectives, Issue 1, May 1986.
 - 6.3.11.3 TR 73501 LightGate[®] Service Interface and Performance Specifications, Issue D, June 1995.
 - 6.3.11.4 TR 73525 MegaLink[®] Service, MegaLink Channel Service & MegaLink Plus Service Interface and Performance Specifications, Issue C, May 1996.
- 6.4 Unbundled Channelization**
 - 6.4.1 BellSouth agrees to offer access to Unbundled Channelization when available pursuant to following terms and conditions and at the rates set forth in the Attachment.
 - 6.4.2 Definition
 - 6.4.2.1 Unbundled Channelization (UC) provides the multiplexing capability that will allow a DS1 (1.544 Mbps) or DS3 (44.736 Mbps) or STS-1 Unbundled Network Element (UNE) or collocation cross-connect to be multiplexed or channelized at a BellSouth central office. This can be accomplished through the use of a stand-alone multiplexer or a digital cross-connect system at the discretion of BellSouth. Once UC has been installed, Covad can have channels activated on an as-needed basis by having BellSouth connect lower level UNEs via Central Office Channel Interfaces (COCIs).
 - 6.4.3 Channelization capabilities will be as follows:
 - 6.4.3.1 DS3 Channelization System: An element that channelizes a DS3 signal into 28 DS1s/STS-1s.
 - 6.4.3.2 DS1 Channelization System: An element that channelizes a DS1 signal into 24 DS0s.
 - 6.4.3.3 Central Office Channel Interfaces (COCI): Elements that can be activated on a channelization system.

- 6.4.4 DS1 Central Office Channel Interface elements can be activated on a DS3 Channelization System.
- 6.4.5 Voice Grade and Digital Data Central Office Channel Interfaces can be activated on a DS1 Channelization System.
- 6.4.6 AMI and B8ZS line coding with either Super Frame (SF) and Extended Super Frame (ESF) framing formats will be supported as options.
- 6.4.7 COCI will be billed on the lower level UNE order that is interfacing with the UC arrangement and will have to be compatible with those UNEs.
- 6.4.8 Channelization may be incorporated within dedicated transport or ordered as a stand-alone capability, which requires either the high or low speed side to be connected to collocation.
- 6.4.9 Technical Requirements
 - 6.4.9.1 In order to assure proper operation with BST provided central office multiplexing functionality, the customer's channelization equipment must adhere strictly to form and protocol standards. Separate standards exist for the multiplex channel bank, for voice frequency encoding, for various signaling schemes, and for subrate digital access.
 - 6.4.9.2 DS0 to DS1 Channelization
 - 6.4.9.2.1 The DS1 signal must be framed utilizing the framing structure defined in ANSI T1.107, *Digital Hierarchy Formats Specifications* and ANSI T1.403.02, *DS1 Robbed-bit Signaling State Definitions*. DS0 to DS1 Channelization requirements are essential the same as defined in BellSouth Technical Reference 73525, *MegaLink® Service, MegaLink® Channel Service, MegaLink® Plus Service, and MegaLink® Light Service Interface and Performance Specification*.
 - 6.4.9.3 DS1 to DS3 Channelization
 - 6.4.9.3.1 The DS3 signal must be framed utilizing the framing structure define in ANSI T1.107, *Digital Hierarchy Formats Specifications*. DS1 to DS3 Channelization requirements are essentially the same as defined in BellSouth Technical Reference 73501, *LightGate® Service Interface and Performance Specifications*. The asynchronous M13 multiplex format (combination of M12 and M23 formats) is specified for terminal equipment that multiplexes 28 DS1s into a DS3.

6.4.9.4 DS1 to STS Channelization

- 6.4.9.4.1 The STS-1 signal must be framed utilizing the framing structure define in ANSI T1.105, *Synchronous Optical Network (SONET) – Basic Description Including Multiplex Structure, Rates and Formats* and T1.105.02, *Synchronous Optical Network (SONET) – Payload Mappings*. DS1 to STS Channelization requirements are essentially the same as defined in BellSouth Technical Reference TR 73501, *LightGate® Service Interface and Performance Specifications*.

6.5 Dark Fiber

The terms, conditions and rates for Dark Fiber are as set forth in Section 2.7 of this Attachment.

6.6 Operational Support Systems (OSS)

The terms, conditions and rates for OSS are as set forth in Section 2.9 of this Attachment.

7. BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service

All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of 8XX Access Ten Digit Screening Services.

7.1 BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service database

7.1.1 The BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service database (herein known as 8XX SCP) is a SCP that contains customer record information and functionality to provide call-handling instructions for 8XX calls. The 8XX SCP IN software stores data downloaded from the national SMS and provides the routing instructions in response to queries from the SSP or tandem. The BellSouth SWA 8XX Toll Free Dialing Ten Digit Screening Service (herein know as 8XX TFD), utilizes the 8XX SCP to provide identification and routing of the 8XX calls, based on the ten digits dialed. 8XX TFD is provided with or without POTS number delivery, dialing number delivery, and other optional complex features as selected by Covad. BellSouth shall provide 8XX TFD in accordance with the following:

7.1.2 Technical Requirements

7.1.2.1 BellSouth shall provide Covad with access to the 8XX record information located in the 8XX SCP. The 8XX SCP contains current records as received from the national SMS and will provide for routing 8XX originating calls based on the dialed ten-digit 8XX number.

7.1.2.2 The 8XX SCP is designated to receive and respond to queries using the American National Standard Specification of Signaling System Seven (SS7) protocol. The 8XX SCP shall determine the carrier identification based on all ten digits of the dialed number and route calls to the carrier, POTS number, dialing number and/or other optional feature selected by Covad.

7.1.2.3 The SCP shall also provide, at Covad's option, such additional feature as described in SR-TSV-002275 (BOC Notes on BellSouth Networks, SR-TSV-002275, Issue 2, (Telcordia (formerly BellCore), April 1994)) as are available to BellSouth. These may include but are not limited to:

7.1.2.3.1 Network Management;

7.1.2.3.2 Customer Sample Collection; and

7.1.2.3.3 Service Maintenance.

7.2 Automatic Location Identification/Data Management System (ALI/DMS)

- 7.2.1 The ALI/DMS Database contains end user information (including name, address, telephone information, and sometimes special information from the local service provider or end user) used to determine to which Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. BellSouth shall provide the Emergency Services Database in accordance with the following:

7.3 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

8 Line Information Database (LIDB)

8.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of LIDB.

8.2 BellSouth will store in its LIDB only records relating to service in the BellSouth region. The LIDB Storage Agreement is included in this Attachment.

8.2.1 Definition

8.2.2 The Line Information Database (LIDB) is a transaction-oriented database accessible through Common Channel Signaling (CCS) networks. It contains records associated with end user Line Numbers and Special Billing Numbers. LIDB accepts queries from other Network Elements and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions such as screening billed numbers that provides the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between BellSouth's CCS network and other CCS networks. LIDB also interfaces to administrative systems.

8.2.3 Technical Requirements

8.2.4 BellSouth will offer to Covad any additional capabilities that are developed for LIDB during the life of this Agreement.

8.2.4.1 BellSouth shall process Covad's Customer records in LIDB at least at parity with BellSouth customer records, with respect to other LIDB functions. BellSouth shall indicate to Covad what additional functions (if any) are performed by LIDB in the BellSouth network.

8.2.4.2 Within two (2) weeks after a request by Covad, BellSouth shall provide Covad with a list of the customer data items, which Covad would have to provide in order to support each required LIDB function. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the data formats, the acceptable values of the data item and the meaning of those values.

8.2.4.3 BellSouth shall provide LIDB systems for which operating deficiencies that would result in calls being blocked shall not exceed 30 minutes per year.

8.2.4.4 BellSouth shall provide LIDB systems for which operating deficiencies that would not result in calls being blocked shall not exceed 12 hours per year.

- 8.2.4.5 BellSouth shall provide LIDB systems for which the LIDB function shall be in overload no more than 12 hours per year.
- 8.2.4.6 All additions, updates and deletions of Covad data to the LIDB shall be solely at the direction of Covad. Such direction from Covad will not be required where the addition, update or deletion is necessary to perform standard fraud control measures (e.g., calling card auto-deactivation).
- 8.2.4.7 BellSouth shall provide priority updates to LIDB for Covad data upon Covad's request (e.g., to support fraud detection), via password-protected telephone card, facsimile, or electronic mail within one hour of notice from the established BellSouth contact.
- 8.2.4.8 BellSouth shall provide LIDB systems such that no more than 0.01% of Covad customer records will be missing from LIDB, as measured by Covad audits. BellSouth will audit Covad records in LIDB against DBAS to identify record mismatches and provide this data to a designated Covad contact person to resolve the status of the records and BellSouth will update system appropriately. BellSouth will refer record of mis-matches to Covad within one business day of audit. Once reconciled records are received back from Covad, BellSouth will update LIDB the same business day if less than 500 records are received before 1:00PM Central Time. If more than 500 records are received, BellSouth will contact Covad to negotiate a time frame for the updates, not to exceed three business days.
- 8.2.4.9 BellSouth shall perform backup and recovery of all of Covad's data in LIDB including sending to LIDB all changes made since the date of the most recent backup copy, in at least the same time frame BellSouth performs backup and recovery of BellSouth data in LIDB for itself. Currently, BellSouth performs backups of the LIDB for itself on a weekly basis and when a new software release is scheduled, a backup is performed prior to loading the new release.
- 8.2.4.10 BellSouth shall provide Covad with LIDB reports of data, which are missing or contain errors, as well as any misrouted errors, within a reasonable time period as negotiated between Covad and BellSouth.
- 8.2.4.11 BellSouth shall prevent any access to or use of Covad data in LIDB by BellSouth personnel that are outside of established administrative and fraud control personnel, or by any other Party that is not authorized by Covad in writing.
- 8.2.4.12 BellSouth shall provide Covad performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners, for Customer Data that is part of an NPA-NXX or RAO-0/1XX wholly or partially owned by Covad at least at parity with BellSouth Customer Data. BellSouth shall obtain from Covad the screening

information associated with LIDB Data Screening of Covad data in accordance with this requirement. BellSouth currently does not have LIDB Data Screening capabilities. When such capability is available, BellSouth shall offer it to Covad under the Bona Fide Request/New Business Process as set forth in General Terms and Conditions.

- 8.2.4.13 BellSouth shall accept queries to LIDB associated with Covad customer records, and shall return responses in accordance with industry standards.
- 8.2.4.14 BellSouth shall provide mean processing time at the LIDB within 0.50 seconds under normal conditions as defined in industry standards.
- 8.2.4.15 BellSouth shall provide processing time at the LIDB within 1 second for 99% of all messages under normal conditions as defined in industry standards.

8.2.5 Interface Requirements

8.2.6 BellSouth shall offer LIDB in accordance with the requirements of this subsection.

8.2.6.1 The interface to LIDB shall be in accordance with the technical references contained within.

8.2.6.2 The CCS interface to LIDB shall be the standard interface described herein.

8.2.6.3 The LIDB Data Base interpretation of the ANSI-TCAP messages shall comply with the technical reference herein. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

8.3 **Rates**

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

9 Signaling

9.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of Signaling Transport Services.

9.2 BellSouth agrees to offer access to signaling and access to BellSouth's signaling databases subject to compatibility testing and at the rates set forth in this Attachment. BellSouth may provide mediated access to BellSouth signaling systems and databases. Available signaling elements include signaling links, signal transfer points and service control points. Signaling functionality will be available with both A-link and B-link connectivity.

9.3 Signaling Link Transport

9.3.1 Definition Signaling Link Transport is a set of two or four dedicated 56 Kbps. transmission paths between CLEC-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

9.3.2 Technical Requirements

9.3.2.1 Signaling Link Transport shall consist of full duplex mode 56 kbps transmission paths.

9.3.3 Of the various options available, Signaling Link Transport shall perform in the following two ways:

9.3.3.1 As an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point Switch (STP) pair; and

9.3.3.2 As a "B-link" which is a connection between two STP pairs in different company networks (e.g., between two STP pairs for two Competitive Local Exchange Carriers (CLECs)).

9.3.4 Signaling Link Transport shall consist of two or more signaling link layers as follows:

9.3.4.1 An A-link layer shall consist of two links.

9.3.4.2 A B-link layer shall consist of four links.

9.3.5 A signaling link layer shall satisfy a performance objective such that:

9.3.5.1 There shall be no more than two minutes down time per year for an A-link layer; and

- 9.3.5.2 There shall be negligible (less than 2 seconds) down time per year for a B-link layer.
- 9.3.5.3 A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
 - 9.3.5.3.1 No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two separate physical paths end-to-end); and
 - 9.3.5.3.2 No two concurrent failures of facilities or equipment shall cause the failure of all four links in a B-link layer (i.e., the links should be provided on a minimum of three separate physical paths end-to-end).
- 9.3.5.4 Interface Requirements
 - 9.3.5.4.1 There shall be a DS1 (1.544 Mbps) interface at the Covad designated SPOIs. Each 56 kbps transmission path shall appear as a DS0 channel within the DS1 interface.
- 9.4 Signaling Transfer Points (STPs)**
 - 9.4.1 Definition - Signaling Transfer Points is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.
 - 9.4.2 Technical Requirements
 - 9.4.2.1 STPs shall provide access to Network Elements connected to BellSouth SS7 network. These include:
 - 9.4.2.1.1 BellSouth Local Switching or Tandem Switching;
 - 9.4.2.1.2 BellSouth Service Control Points/DataBases;
 - 9.4.2.1.3 Third-party local or tandem switching;
 - 9.4.2.1.4 Third-party-provided STPs.
 - 9.4.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the BellSouth SS7 network. This explicitly includes the use of the BellSouth SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the BellSouth SS7 network (i.e., transient messages) When the BellSouth SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital

Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.

- 9.4.2.3 If a BellSouth tandem switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between a Covad local switch and third party local switch, the BellSouth SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between Covad local STPs and the STPs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to BellSouth STPs.
- 9.4.2.4 STPs shall provide all functions of the MTP as defined in the applicable industry standard technical references.
- 9.4.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as defined in Telcordia (formerly BellCore) ANSI Interconnection Requirements. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is a Covad or third party local or tandem switching system directly connected to BellSouth SS7 network, BellSouth shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, BellSouth shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with BellSouth SS7 network, and shall not perform SCCP Subsystem Management of the destination. If BellSouth performs final GTT to a Covad database, then Covad agrees to provide BellSouth with the Destination Point Code for the Covad database.
- 9.4.2.6 STPs shall provide on a non-discriminatory basis all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 12.4.5 of this Attachment. All OMAP functions will be on a "where available" basis and can include:
 - 9.4.2.6.1 MTP Routing Verification Test (MRVT); and
 - 9.4.2.6.2 SCCP Routing Verification Test (SRVT).
- 9.4.2.7 In cases where the destination signaling point is a BellSouth local or tandem switching system or database, or is a Covad or third party local or tandem switching system directly connected to the BellSouth SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the BellSouth SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI

standards and available capabilities of BellSouth STPs, and if mutually agreed upon by Covad and BellSouth.

9.4.2.8 STPs shall be on parity with BellSouth.

9.4.2.9 SS7 Advanced Intelligent Network (AIN) Access

9.4.2.9.1 When technically feasible and upon request by Covad, SS7 Access shall be made available in association with switching. SS7 AIN Access is the provisioning of AIN 0.1 triggers in an equipped BellSouth local switch and interconnection of the BellSouth SS7 network with the Covad SS7 network to exchange TCAP queries and responses with a Covad SCP.

9.4.2.9.2 SS7 AIN Access shall provide Covad SCP access to BellSouth local switch in association with switching via interconnection of BellSouth SS7 and Covad SS7 Networks. BellSouth shall offer SS7 access through its STPs. If BellSouth requires a mediation device on any part of its network specific to this form of access, BellSouth must route its messages in the same manner. The interconnection arrangement shall result in the BellSouth local switch recognizing the Covad SCP as at least at parity with BellSouth's SCP's in terms of interfaces, performance and capabilities.

9.4.3 Interface Requirements

9.4.3.1 BellSouth shall provide the following STPs options to connect Covad or Covad-designated local switching systems or STPs to the BellSouth SS7 network:

9.4.3.1.1 An A-link interface from Covad local switching systems; and,

9.4.3.1.2 A B-link interface from Covad local STPs.

9.4.3.2 Each type of interface shall be provided by one or more sets (layers) of signaling links.

9.4.3.3 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where BellSouth STP is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. BellSouth shall offer higher rate DS1 signaling for interconnecting Covad local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs. BellSouth and Covad will work jointly to establish mutually acceptable SPOIs.

9.4.3.4 BellSouth CO shall provide intraoffice diversity between the SPOIs and BellSouth STPs, so that no single failure of intraoffice facilities or equipment shall cause the

failure of both B-links in a layer connecting to a BellSouth STP. BellSouth and Covad will work jointly to establish mutually acceptable SPOIs.

9.4.3.5 STPs shall provide all functions of the MTP as defined in the applicable industry standard technical references.

9.4.3.6 Message Screening

9.4.3.6.1 BellSouth shall set message screening parameters so as to accept valid messages from Covad local or tandem switching systems destined to any signaling point within BellSouth's SS7 network where the Covad switching system has a legitimate signaling relation.

9.4.3.6.2 BellSouth shall set message screening parameters so as to pass valid messages from Covad local or tandem switching systems destined to any signaling point or network accessed through BellSouth's SS7 network where the Covad switching system has a legitimate signaling relation.

9.4.3.6.3 BellSouth shall set message screening parameters so as to accept and pass/send valid messages destined to and from Covad from any signaling point or network interconnected through BellSouth's SS7 network where the Covad SCP has a legitimate signaling relation.

9.4.4 STPs shall be equal to or better than all of the requirements for STPs set forth in the applicable industry standard technical references.

9.5 Service Control Points/Databases

9.5.1 Definition

9.5.1.1 Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Local Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System, Calling Name Database, access to Service Creation Environment and Service Management System (SCE/SMS) application databases and Directory Assistance.

9.5.2 A Service Control Point (SCP) is a specific type of Database functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. Service Management Systems provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data stored in SCPs.

9.5.3 Technical Requirements for SCPs/Databases

9.5.3.1 Requirements for SCPs/Databases within this section address storage of information, access to information (e.g. signaling protocols, response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to Covad in accordance with the following requirements.

9.5.3.2 BellSouth shall provide physical access to SCPs through the SS7 network and protocols with TCAP as the application layer protocol.

9.5.3.3 BellSouth shall provide physical interconnection to databases via industry standard interfaces and protocols (e.g. SS7, ISDN and X.25).

9.5.3.4 The reliability of interconnection options shall be consistent with requirements for diversity and survivability.

9.5.4 Database Availability

9.5.4.1 Call processing databases shall have a maximum unscheduled availability of 30 minutes per year. Unavailability due to software and hardware upgrades shall be scheduled during minimal usage periods and only be undertaken upon proper notification to providers, which might be impacted. Any downtime associated with the provision of call processing related databases will impact all service providers, including BellSouth, equally.

9.5.4.2 The operational interface provided by BellSouth shall complete Database transactions (i.e., add, modify, delete) for Covad customer records stored in BellSouth databases within 3 days, or sooner where BellSouth provisions its own customer records within a shorter interval.

9.6 **Local Number Portability Database**

9.6.1 Definition

9.6.2 The Permanent Number Portability (PNP) database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. PNP is currently being worked in industry forums. The results of these forums will dictate the industry direction of PNP. BellSouth agrees to provide access to the PNP database at rates, terms and conditions as set forth by BellSouth and in accordance with an effective FCC or Commission directive.

9.7 **SS7 Network Interconnection**

9.7.1 Definition.

- 9.7.2 SS7 Network Interconnection is the interconnection of Covad local Signaling Transfer Point Switches (STP) and Covad local or tandem switching systems with BellSouth STPs. This interconnection provides connectivity that enables the exchange of SS7 messages among BellSouth switching systems and databases (DBs), Covad local or tandem switching systems, and other third-party switching systems directly connected to the BellSouth SS7 network.
- 9.7.3 Technical Requirements
- 9.7.3.1 SS7 Network Interconnection shall provide connectivity to all components of the BellSouth SS7 network. These include:
- 9.7.3.1.1 BellSouth local or tandem switching systems;
 - 9.7.3.1.2 BellSouth DBs; and
 - 9.7.3.1.3 Other third-party local or tandem switching systems.
- 9.7.4 The connectivity provided by SS7 Network Interconnection shall fully support the functions of BellSouth switching systems and DBs and Covad or other third-party switching systems with A-link access to the BellSouth SS7 network.
- 9.7.5 If traffic is routed based on dialed or translated digits between a Covad local switching system and a BellSouth or other third-party local switching system, either directly or via a BellSouth tandem switching system, then it is a requirement that the BellSouth SS7 network convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the Covad local STPs and BellSouth or other third-party local switch.
- 9.7.6 When the capability to route messages based on Intermediate Signaling Network Identifier (ISNI) is generally available on BellSouth STPs, the BellSouth SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the BellSouth switch routes traffic based on a Carrier Identification Code (CIC).
- 9.7.7 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1.111. This includes:
- 9.7.7.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
 - 9.7.7.2 Signaling Link functions, as specified in ANSI T1.111.3; and
 - 9.7.7.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

- 9.7.8 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. Where the destination signaling point is a BellSouth switching system or DB, or is another third-party local or tandem switching system directly connected to the BellSouth SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination. Where the destination signaling point is a Covad local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of Covad local STPs, and shall not include SCCP Subsystem Management of the destination.
- 9.7.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.
- 9.7.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.
- 9.7.11 If and when Internetwork MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of BellSouth STPs, SS7 Network Interconnection shall provide these functions of the OMAP.
- 9.7.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:
- 9.7.12.1 MTP Performance, as specified in ANSI T1.111.6;
- 9.7.12.2 SCCP Performance, as specified in ANSI T1.112.5; and
- 9.7.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.
- 9.7.13 Interface Requirements
- 9.7.13.1 BellSouth shall offer the following SS7 Network Interconnection options to connect Covad or Covad-designated local or tandem switching systems or STPs to the BellSouth SS7 network:
- 9.7.13.1.1 A-link interface from Covad local or tandem switching systems; and
- 9.7.13.1.2 B-link interface from Covad STPs.
- 9.7.13.2 The Signaling Point of Interconnection (SPOI) for each link shall be located at a cross-connect element, such as a DSX-1, in the Central Office (CO) where the BellSouth STP is located. There shall be a DS1 or higher rate transport interface at

each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. BellSouth shall offer higher rate DS1 signaling links for interconnecting Covad local switching systems or STPs with BellSouth STPs as soon as these become approved ANSI standards and available capabilities of BellSouth STPs. BellSouth and Covad will work jointly to establish mutually acceptable SPOI.

- 9.7.13.3 BellSouth CO shall provide intraoffice diversity between the SPOIs and the BellSouth STP, so that no single failure of intraoffice facilities or equipment shall cause the failure of both B-links in a layer connecting to a BellSouth STP. BellSouth and Covad will work jointly to establish mutually acceptable SPOI.
- 9.7.13.4 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP, and TCAP. These protocol interfaces shall conform to the applicable industry standard technical references.
- 9.7.13.5 BellSouth shall set message screening parameters to accept messages from Covad local or tandem switching systems destined to any signaling point in the BellSouth SS7 network with which the Covad switching system has a legitimate signaling relation.
- 9.7.13.6 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the applicable industry standard technical references.

9.8 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

~~10. Operator Call Processing, Inward Operator Services and Directory Assistance Services~~

~~10.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of Operator Call Processing, Inward Operator Services and Directory Assistance Services.~~

~~10.2 Operator Systems~~

~~10.2.1 Definition. Operator Systems is the Network Element that provides operator and automated call handling and billing, special services, end user telephone listings and optional call completion services. The Operator Systems, Network Element provides two types of functions, Operator Service functions and Directory Assistance Service functions, each of which are described in detail below.~~

~~10.3 Operator Service~~

~~10.3.1 Definition Operator Service provides: (1) operator handling for call completion (for example, collect, third number billing, and manual credit card calls), (2) operator or automated assistance for billing after the end user has dialed the called number (for example, credit card calls), and (3) special services including but not limited to Busy Line Verification and Emergency Line Interrupt (ELI), Emergency Agency Call, Operator-assisted Directory Assistance, and Rate Quotes.~~

~~10.3.2 Requirements~~

~~10.3.2.1 When Covad requests BellSouth to provide Operator Services, the following requirements apply:~~

~~10.3.2.1.1 BellSouth shall complete 0+ and 0- dialed local calls.~~

~~10.3.2.1.2 BellSouth shall complete 0+ intral-ATA toll calls.~~

~~10.3.2.1.3 BellSouth shall process calls that are billed to Covad end user's calling card that can be validated by BellSouth.~~

~~10.3.2.1.4 BellSouth shall complete person-to-person calls.~~

~~10.3.2.1.5 BellSouth shall complete collect calls.~~

~~10.3.2.1.6 BellSouth shall provide the capability for callers to bill to a third party and complete such calls.~~

~~10.3.2.1.7 BellSouth shall complete station-to-station calls.~~

~~10.3.2.1.8 — BellSouth shall process emergency calls.~~

~~10.3.2.1.9 — BellSouth shall process Busy Line Verify and Emergency Line Interrupt requests.~~

~~10.3.2.1.10 — BellSouth shall process emergency call trace, as they do for their End users prior to the Effective Date. Call must originate from a 911 provider.~~

~~10.3.2.1.11 — BellSouth shall process operator-assisted directory assistance calls.~~

~~10.3.2.1.12 — BellSouth shall adhere to equal access requirements, providing Covad local end users the same IXC access as provided to BellSouth end users.~~

~~10.3.2.1.13 — BellSouth shall exercise at least the same level of fraud control in providing Operator Service to Covad that BellSouth provides for its own operator service.~~

~~10.3.2.1.14 — BellSouth shall perform Billed Number Screening when handling Collect, Person-to-Person, and Billed to Third Party calls.~~

~~10.3.2.1.15 — BellSouth shall direct customer account and other similar inquiries to the customer service center designated by Covad.~~

~~10.3.2.1.16 — BellSouth shall provide a feed of customer call records in "EMI" format to Covad in accordance with CLEC ODUF standards specified in Attachment 7.~~

~~10.3.3 — Interface Requirements~~

~~10.3.3.1 — With respect to Operator Services for calls that originate on local switching capability provided by or on behalf of Covad, the interface requirements shall conform to the then current established system interface specifications for the platform used to provide Operator Service and the interface shall conform to industry standards.~~

~~10.4 — Directory Assistance Service~~

~~10.4.1 — Definition — Directory Assistance Service provides local end user telephone number listings with the option to complete the call at the callers direction separate and distinct from local switching.~~

~~10.4.2 — Requirements~~

~~10.4.3 — Directory Assistance Service shall provide up to two listing requests per call. If available and if requested by Covad's end user, BellSouth shall provide caller-optional directory assistance call completion service at rates contained in this Attachment to one of the provided listings, equal to that which BellSouth provides its end users. If not available, Covad may request such requirement pursuant to the Bona Fide Request/New Business Process as set forth in General Terms and Conditions.~~

~~10.4.4 — Directory Assistance Service Updates~~

~~10.4.4.1 BellSouth shall update end user listings changes daily. These changes include:~~

~~10.4.4.1.1 New end user connections BellSouth will provide service to Covad that is equal to the service it provides to itself and its end users;~~

~~10.4.4.1.2 End user disconnections: BellSouth will provide service to Covad that is equal to the service it provides to itself and its end users; and~~

~~10.4.4.1.3 End user address changes. BellSouth will provide service to Covad that is equal to the service it provides to itself and its end users;~~

~~10.4.4.1.4 These updates shall also be provided for non listed and non published numbers for use in emergencies-~~

~~10.4.5 Branding for Operator Call Processing and Directory Assistance~~

~~10.4.5.1 The BellSouth Operator Systems Branding Feature provides a definable announcement to Covad end users using Directory Assistance (DA)/Operator Call Processing (OCP) prior to placing them in queue or connecting them to an available operator or automated operator system. This feature allows Covad to have its calls custom branded with Covad's name on whose behalf BellSouth is providing Directory Assistance and/or Operator Call Processing. Rates for Custom Branding, Operator Call Process and Directory Assistance are set forth in this Attachment.~~

~~10.4.5.2 BellSouth offers four service levels of branding to Covad when ordering Directory Assistance and/or Operator Call Processing-~~

~~10.4.5.2.1 Service Level 1 BellSouth Branding~~

~~10.4.5.2.2 Service Level 2 Unbranded~~

~~10.4.5.2.3 Service Level 3 Custom Branding~~

~~10.4.5.2.4 Service Level 4 Self Branding (applicable only to Covad for Resale or use with an Unbundled Port when routing to an operator service provider other than BellSouth).~~

~~10.4.6 For Resellers and Use with an Unbundled Port~~

~~10.4.6.1 BellSouth Branding is the Default Service Level.~~

~~10.4.6.2 Unbranding, Custom Branding, and Self Branding require Covad to order selective routing for each originating BellSouth end office identified by Covad. Rates for Selective Routing are set forth in this Attachment.~~

- ~~10.4.6.3 Customer Branding and Self Branding require Covad to order dedicated trunking from each BellSouth end office identified by Covad, to either the BellSouth Traffic Operator Position System (TOPS) or Covad Operator Service Provider. Rates for trunks are set forth in applicable BellSouth tariffs.~~
- ~~10.4.6.4 Unbranding Unbranded Directory Assistance and/or Operator Call Processing calls ride common trunk groups provisioned by BellSouth from those end offices identified by Covad to the BellSouth TOPS. These calls are routed to "No Announcement"~~
- ~~10.4.7 For Facilities Based Carriers~~
 - ~~10.4.7.1 All Service Levels require Covad to order dedicated trunking from their end office(s) point of interface to the BellSouth TOPS Switches. Rates for trunks are set forth in applicable BellSouth tariffs.~~
 - ~~10.4.7.2 Customized Branding includes charges for the recording of the branding announcement and the loading of the audio units in each TOPS Switch. IVS and NAV equipment for which Covad requires service.~~
- ~~10.4.8 Directory Assistance customized branding uses:~~
 - ~~10.4.8.1 the recording of the name;~~
 - ~~10.4.8.2 the front end loading of the Digital Recorded Announcement Machine (DRAM) in each TOPS switch;~~
- ~~10.4.9 Operator Call Processing customized branding uses:~~
 - ~~10.4.9.1 the recording of the name;~~
 - ~~10.4.9.2 the front end loading of the DRAM in the TOPS Switch;~~
 - ~~10.4.9.3 the back end loading in the audio units in the Automated Alternate Billing System (AABS) in the Interactive Voice Subsystem (IVS);~~
 - ~~10.4.9.4 the 0 automation loading for the audio units in the Enhanced Billing and Access Service (EBAS) in the Network Applications Vehicle (NAV);~~
 - ~~10.4.9.5 BellSouth will provide to Covad purchasing local BellSouth switching and reselling BellSouth local exchange service, selective routing of calls to a requested directory assistance services platform or operator services platform. Covad end users may use the same dialing arrangements as BellSouth end users, but obtain a Covad branded service.~~

~~10.5 Directory Assistance Database Service (DADS)~~

~~10.5.1 BellSouth shall make its Directory Assistance Database Service (DADS) available solely for the expressed purpose of providing Directory Assistance type services to Covad end users. The term "end user" denotes any entity which obtains Directory Assistance type services for its own use from a DADS customer. Directory Assistance type service is defined as Voice Directory Assistance (DA Operator assisted and Electronic Directory Assistance (Data System assisted)). Covad agrees that Directory Assistance Database Service (DADS) will not be used for any purpose which violates federal or state laws, statutes, regulatory orders or tariffs. Except for the permitted users, Covad agrees not to disclose DADS to others and shall provide due care in providing for the security and confidentiality of DADS. Further, Covad authorizes the inclusion of Covad Directory Assistance listings in the BellSouth Directory Assistance products.~~

~~10.5.2 BellSouth shall provide Covad initially with a base file of subscriber listings which reflect all listing change activity occurring since Covad's most recent update via magnetic tape, and subsequently using electronic connectivity such as Network Data Mover to be developed mutually by Covad and BellSouth. Covad agrees to assume the costs associated with CONNECT: DirectTM connectivity, which will vary depending upon volume and mileage.~~

~~10.5.3 BellSouth will require approximately one month after receiving an order to prepare the Base File. BellSouth will provide daily updates which will reflect all listing change activity occurring since CLEC's most recent update. BellSouth shall provide updates to Covad on a Business, Residence, or combined Business and Residence basis. Covad agrees that the updates shall be used solely to keep the information current. Delivery of Daily Updates will commence the day after Covad receives the Base File.~~

~~10.5.4 BellSouth is authorized to include Covad Directory Assistance Listing Information in its Directory Assistance Database Service (DADS). Any other use by BellSouth of Covad Directory Assistance Listing Information is not authorized and with the exception of a request for DADS, BellSouth shall refer any request for such information to Covad.~~

~~10.5.5 Rates for DADS are as set forth in this Attachment.~~

~~10.6 Direct Access to Directory Assistance Service~~

~~10.6.1 Direct Access to Directory Assistance Service (DADAS) will provide Covad's directory assistance operators with the ability to search all available BellSouth's subscriber listings using the Directory Assistance search format. Subscription to~~

~~DADAS will allow Covad to utilize its own switch, operator workstations and optional audio subsystems.~~

~~10.6.2 BellSouth will provide DADAS from its DA location. Covad will access the DADAS system via a telephone company provided point of availability. Covad has the responsibility of providing the physical links required to connect to the point of availability. These facilities may be purchased from the telephone company as rates and charges billed separately from the charges associated with this offering.~~

~~10.6.3 A specified interface to each Covad subsystem will be provided by BellSouth. Interconnection between Covad's system and a specified BellSouth location will be pursuant to the use of Covad owned or Covad leased facilities and shall be appropriate sized based upon the volume of queries being generated by Covad.~~

~~10.6.4 The specifications for the three interfaces necessary for interconnection are available in the following documents:~~

~~10.6.4.1 DADAS to Subscriber Operator Position System—Northern Telecom Document CSI-2300-07; Universal Gateway/Position Message Interface Format Specification;~~

~~10.6.4.2 DADAS to Subscriber Switch—Northern Telecom Document Q210-1 Version A107; NTDMS/CCIDAS System Application Protocol; and AT&T Document 250-900-535 Operator Services Position System Listing Service and Application Call Processing Data Link Interface Specification.~~

~~10.6.4.3 DADAS to Audio Subsystem (Optional)—Directory One Call Control to Audio Response Unit system interface specifications are available through Northern Telecom as a licensed access protocol—Northern Telecom Document 355-004424 and Gateway/Interactive Voice subsystem Protocol Specification.~~

~~10.6.5 Rates for DADAS are as set forth in this Attachment.~~

10.7 Automatic Location Identification/Data Management System (ALI/DMS)

10.7.1 The ALI/DMS Database contains end user information (including name, address, telephone information, and sometimes special information from the local service provider or end user) used to determine to which Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911. BellSouth shall provide the Emergency Services Database in accordance with the following:

10.7.2 Technical Requirements

10.7.2.1 BellSouth shall offer Covad a data link to the ALI/DMS database or permit Covad to provide its own data link to the ALI/DMS database. BellSouth shall provide error

reports from the ALI/DMS database to Covad immediately after Covad inputs information into the ALI/DMS database. Alternately, Covad may utilize BellSouth, to enter end user information into the data base on a demand basis, and validate end user information on a demand basis.

10.7.2.2 The ALI/DMS database shall contain the following end user information:

10.7.2.2.1 Name;

10.7.2.2.2 Address;

10.7.2.2.3 Telephone number; and

10.7.2.2.4 Other information as appropriate (e.g., whether a end user is blind or deaf or has another disability).

10.7.2.3 When BellSouth is responsible for administering the ALI/DMS database in its entirety, ported number NXXs entries for the ported numbers should be maintained unless Covad requests otherwise and shall be updated if Covad requests, provided Covad supplies BellSouth with the updates.

10.7.2.4 When Remote Call Forwarding (RCF) is used to provide number portability to the local end user and a remark or other appropriate field information is available in the database, the shadow or "forwarded-to" number and an indication that the number is ported shall be added to the customer record.

10.7.2.5 If BellSouth is responsible for configuring PSAP features (for cases when the PSAP or BellSouth supports an ISDN interface) it shall ensure that CLASS Automatic Recall (Call Return) is not used to call back to the ported number. Although BellSouth currently does not have ISDN interface, BellSouth agrees to comply with this requirement once ISDN interfaces are in place.

10.7.3 Interface Requirements

The interface between the E911 Switch or Tandem and the ALI/DMS database for Covad end users shall meet industry standards.

10.8 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

11. Calling Name (CNAM) Database Service

- 11.1 All of the negotiated rates, terms and conditions set forth in this Section pertain to the provision of CNAM.
- 11.2 The Agreement for Calling Name (CNAM) with standard pricing is included as Exhibit B to this Attachment. Covad must provide to its account manager a written request with a requested activation date to activate this service. If Covad is interested in requesting CNAM with volume and term pricing, Covad must contact its account manager to request a separate CNAM volume and term Agreement.
- 11.3 SCPs/Databases shall be equal to or better than all of the requirements for SCPs/Databases set forth in the applicable industry standard technical references.
- 11.4 Service Creation Environment and Service Management System (SCE/SMS) Advanced Intelligent Network (AIN) Access**
 - 11.4.1 BellSouth's Service Creation Environment and Service Management System (SCE/SMS) Advanced Intelligent Network (AIN) Access shall provide Covad the capability that will allow Covad and other third parties to create service applications in a BellSouth Service Creation Environment and deploy those applications in a BellSouth SMS to a BellSouth SCP. The third party service applications interact with AIN triggers provisioned on a BellSouth SSP.
 - 11.4.2 BellSouth's SCE/SMS AIN Access shall provide access to SCE hardware, software, testing and technical support (e.g., help desk, system administrator) resources available to Covad. Scheduling procedures shall provide Covad equivalent priority to these resources.
 - 11.4.2 BellSouth SCP shall partition and protect Covad service logic and data from unauthorized access, execution or other types of compromise.
 - 11.4.3 When Covad selects SCE/SMS AIN Access, BellSouth shall provide training, documentation, and technical support to enable Covad to use BellSouth's SCE/SMS AIN Access to create and administer applications. Training, documentation, and technical support will address use of SCE and SMS access and administrative functions, but will not include support for the creation of a specific service application.
 - 11.4.4 When Covad selects SCE/SMS AIN Access, BellSouth shall provide for a secure, controlled access environment in association with its internal use of AIN components. Covad access will be provided via remote data connection (e.g., dial-in, ISDN).

- 11.4.5 When Covad selects SCE/SMS AIN Access, BellSouth shall allow Covad to download data forms and/or tables to BellSouth SCP via BellSouth SMS without intervention from BellSouth (e.g., service customization and end user subscription).

11.5 Rates

The prices that Covad shall pay to BellSouth for Network Elements and Other Services are set forth in Exhibit C to this Attachment.

12. Basic 911 and E911

12.1 All of the negotiated terms and conditions set forth in this Section pertain to the provision of Basic 911 and E911.

12.2 If Covad orders network elements and other services, then Covad is also responsible for providing E911 to its end users. BellSouth agrees to offer access to the 911/E911 network pursuant to the following terms and conditions set forth in this Attachment.

12.3 Definition

12.4 Basic 911 and E911 is an additional requirement that provides a caller access to the applicable emergency service bureau by dialing a 3-digit universal telephone number (911).

12.5 Requirements

12.5.1 Basic 911 Service Provisioning. For Basic 911 service, BellSouth will provide to Covad a list consisting of each municipality that subscribes to Basic 911 service. The list will also provide, if known, the E911 conversion date for each municipality and, for network routing purposes, a ten-digit directory number representing the appropriate emergency answering position for each municipality subscribing to 911. Covad will be required to arrange to accept 911 calls from its end users in municipalities that subscribe to Basic 911 service and translate the 911 call to the appropriate 10-digit directory number as stated on the list provided by BellSouth. Covad will be required to route that call to BellSouth at the appropriate tandem or end office. When a municipality converts to E911 service, Covad will be required to discontinue the Basic 911 procedures and begin using E911 procedures.

12.5.2 E911 Service Provisioning. For E911 service, Covad will be required to install a minimum of two dedicated trunks originating from the Covad serving wire center and terminating to the appropriate E911 tandem. The dedicated trunks shall be, at a minimum, DS-0 level trunks configured either as a 2-wire analog interface or as part of a digital (1.544 Mb/s) interface. Either configuration shall use CAMA-type signaling with multifrequency ("MF") pulsing that will deliver automatic number identification ("ANI") with the voice portion of the call. If the user interface is digital, MF pulses, as well as other AC signals, shall be encoded per the u-255 Law convention. Covad will be required to provide BellSouth daily updates to the E911 database. Covad will be required to forward 911 calls to the appropriate E911 tandem, along with ANI, based upon the current E911 end office to tandem homing arrangement as provided by BellSouth. If the E911 tandem trunks are not available, Covad will be required to route the call to a designated 7-digit local number residing in the appropriate Public Service Answering Point ("PSAP"). This call will be

transported over BellSouth's interoffice network and will not carry the ANI of the calling party. Covad shall be responsible for providing BellSouth with complete and accurate data for submission to the 911/E911 database for the purpose of providing 911/E911 to its end users.

- 12.5.3 Rates. Charges for 911/E911 service are borne by the municipality purchasing the service. BellSouth will impose no charge on Covad beyond applicable charges for BellSouth trunking arrangements.
- 12.5.4 Basic 911 and E911 functions provided to Covad shall be at least at parity with the support and services that BellSouth provides to its end users for such similar functionality.
- 12.5.5 Detailed Practices and Procedures. The detailed practices and procedures contained in the E911 Local Exchange Carrier Guide For Facility-Based Providers as amended from time to time during the term of this Agreement will determine the appropriate practices and procedures for BellSouth and Covad to follow in providing 911/E911 services.

13. True-Up

This section applies only to other rates that are interim or expressly subject to true-up under this attachment.

- 13.1 The interim prices for Network Elements and Other Services and Local Interconnection shall be subject to true-up according to the following procedures:
- 13.2 The interim prices shall be trued-up, either up or down, based on final prices determined either by further agreement between the Parties, or by a final order (including any appeals) of the Commission which final order meets the criteria of (3) below. The Parties shall implement the true-up by comparing the actual volumes and demand for each item, together with interim prices for each item, with the final prices determined for each item. Each Party shall keep its own records upon which the true-up can be based, and any final payment from one Party to the other shall be in an amount agreed upon by the Parties based on such records. In the event of any disagreement as between the records or the Parties regarding the amount of such true-up, the Parties agree that the body having jurisdiction over the matter shall be called upon to resolve such differences, or the Parties may mutually agree to submit the matter to the Dispute Resolution process in accordance with the provisions of Section 16 of the General Terms and Conditions and Attachment 1 of the Agreement.

- 13.3 The Parties may continue to negotiate toward final prices, but in the event that no such Agreement is reached within nine (9) months, either Party may petition the Commission to resolve such disputes and to determine final prices for each item. Alternatively, upon mutual agreement, the Parties may submit the matter to the Dispute Resolution Process set forth in Section 16 of the General Terms and Conditions and Attachment 1 of the Agreement, so long as they file the resulting Agreement with the Commission as a “negotiated Agreement” under Section 252(e) of the Act.
- 13.4 A final order of this Commission that forms the basis of a true-up shall be the final order as to prices based on appropriate cost studies, or potentially may be a final order in any other Commission proceeding which meets the following criteria:
- (a) BellSouth and Covad are entitled to be a full Party to the proceeding;
 - (b) It shall apply the provisions of the federal Telecommunications Act of 1996, including but not limited to Section 252(d)(1) (which contains pricing standards) and all then-effective implementing rules and regulations; and,
 - (c) It shall include as an issue the geographic deaveraging of network element and other services prices, which deaveraged prices, if any are required by said final order, shall form the basis of any true-up.

EXHIBIT A

**LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

I. SCOPE

A. This Agreement sets forth the terms and conditions pursuant to which BellSouth agrees to store in its LIDB certain information at the request of Covad and pursuant to which BellSouth, its LIDB customers and Covad shall have access to such information. Covad understands that BellSouth provides access to information in its LIDB to various telecommunications service providers pursuant to applicable tariffs and agrees that information stored at the request of Covad, pursuant to this Agreement, shall be available to those telecommunications service providers. The terms and conditions contained in the attached Addendum(s) are hereby made a part of this Agreement as if fully incorporated herein.

B. LIDB is accessed for the following purposes:

1. Billed Number Screening
2. Calling Card Validation
3. Fraud Control

C. BellSouth will provide seven days per week, 24-hours per day, fraud monitoring on Calling Cards, bill-to-third and collect calls made to numbers in BellSouth's LIDB, provided that such information is included in the LIDB query. BellSouth will establish fraud alert thresholds and will notify Covad of fraud alerts so that Covad may take action it deems appropriate. Covad understands and agrees BellSouth will administer all data stored in the LIDB, including the data provided by Covad pursuant to this Agreement, in the same manner as BellSouth's data for BellSouth's end user customers. BellSouth shall not be responsible to Covad for any lost revenue which may result from BellSouth's administration of the LIDB pursuant to its established practices and procedures as they exist and as they may be changed by BellSouth in its sole discretion from time to time.

Covad understands that BellSouth currently has in effect numerous billing and collection agreements with various interexchange carriers and billing clearing houses. Covad further understands that these billing and collection customers of BellSouth query BellSouth's LIDB to determine whether to accept various billing options from end users. Additionally, Covad understands that presently BellSouth has no method to differentiate between BellSouth's own billing and line data in the LIDB and such data which it includes in the LIDB on Covad's behalf pursuant to this Agreement. Therefore, until such time as BellSouth can and does implement in its LIDB and its

supporting systems the means to differentiate Covad's data from BellSouth's data and the Parties to this Agreement execute appropriate amendments hereto, the following terms and conditions shall apply:

- (a) Covad agrees that it will accept responsibility for telecommunications services billed by BellSouth for its billing and collection customers for Covad's end user accounts which are resident in LIDB pursuant to this Agreement. Covad authorizes BellSouth to place such charges on Covad's bill from BellSouth and agrees that it shall pay all such charges. Charges for which Covad hereby takes responsibility include, but are not limited to, collect and third number calls.
- (b) Charges for such services shall appear on a separate BellSouth bill page identified with the name of the entity for which BellSouth is billing the charge.
- (c) Covad shall have the responsibility to render a billing statement to its end users for these charges, but Covad's obligation to pay BellSouth for the charges billed shall be independent of whether Covad is able or not to collect from Covad's end users.
- (d) BellSouth shall not become involved in any disputes between Covad and the entities for which BellSouth performs billing and collection. BellSouth will not issue adjustments for charges billed on behalf of an entity to Covad. It shall be the responsibility of Covad and the other entity to negotiate and arrange for any appropriate adjustments.

II. TERM

This Agreement will be effective as of _____, and will continue in effect for one year, and thereafter may be continued until terminated by either Party upon thirty (30) days written notice to the other Party.

III. FEES FOR SERVICE AND TAXES

- A. Covad will not be charged a fee for storage services provided by BellSouth to Covad, as described in Section I of this Agreement.
- B. Sales, use and all other taxes (excluding taxes on BellSouth's income) determined by BellSouth or any taxing authority to be due to any federal, state or local taxing jurisdiction with respect to the provision of the service set forth herein will be paid by Covad. Covad shall have the right to have BellSouth contest with the imposing

jurisdiction, at Covad's expense, any such taxes that Covad deems are improperly levied.

IV. MISCELLANEOUS

- A. This LIDB Storage Agreement shall be subject to the terms and conditions of the Interconnection Agreement between Covad and BellSouth.

**FACILITIES BASED ADDENDUM
TO LINE INFORMATION DATA BASE (LIDB)
STORAGE AGREEMENT**

This is a Facilities Based Addendum to the Line Information Data Base Storage Agreement dated _____, between BellSouth Telecommunications, Inc. ("BellSouth"), and _____ ("Covad"), effective the _____ day of _____, _____.

I. GENERAL

This Addendum sets forth the terms and conditions for Covad's provision of billing number information to BellSouth for inclusion in BellSouth's LIDB. BellSouth will store in its LIDB the billing number information provided by Covad, and BellSouth will provide responses to on-line, call-by-call queries to this information for purposes specified in Section I.B. of the Agreement.

II. DEFINITIONS

- A. Billing number - a number that Covad creates for the purpose of identifying an account liable for charges. This number may be a line or a special billing number.
- B. Line number - a ten digit number that identifies a telephone line administered by Covad.
- C. Special billing number - a ten digit number that identifies a billing account established by Covad.
- D. Calling Card number - a billing number plus PIN number.
- E. PIN number - a four digit security code assigned by Covad which is added to a billing number to compose a fourteen digit calling card number.
- F. Toll billing exception indicator - associated with a billing number to indicate that it is considered invalid for billing of collect calls or third number calls or both, by Covad.
- G. Billed Number Screening - refers to the activity of determining whether a toll billing exception indicator is present for a particular billing number.

- H. Calling Card Validation - refers to the activity of determining whether a particular calling card number exists as stated or otherwise provided by a caller.
- I. Billing number information - information about billing number, Calling Card number and toll billing exception indicator provided to BellSouth by Covad.

III. RESPONSIBILITIES OF PARTIES

- A. Covad will provide its billing number information to BellSouth's LIDB each business day by a method that has been mutually agreed upon by both Parties.
- B. BellSouth will store in its LIDB the billing number information provided by Covad. Under normal operating conditions, BellSouth shall include Covad's billing number information in its LIDB no later than two business days following BellSouth's receipt of such billing number information, provided that BellSouth shall not be held responsible for any delay or failure in performance to the extent such delay or failure is caused by circumstances or conditions beyond BellSouth's reasonable control. BellSouth will store in its LIDB an unlimited volume of Covad's working telephone numbers.
- C. BellSouth will provide responses to on-line, call-by-call queries to the stored information for the specific purposes listed in the next paragraph.
- D. BellSouth is authorized to use the billing number information provided by Covad to perform the following functions for authorized users on an on-line basis:
 - 1. Validate a 14 digit Calling Card number where the first 10 digits are a line number or special billing number assigned by Covad, and where the last four digits (PIN) are a security code assigned by Covad.
 - 2. Determine whether Covad or the subscriber has identified the billing number as one which should not be billed for collect or third number calls, or both.
- E. Covad will provide its own billing number information to BellSouth for storage and to be used for Billed Number Screening and Calling Card Validation. Covad will arrange and pay for transport of updates to BellSouth.

IV. COMPLIANCE

Unless expressly authorized in writing by Covad, all billing number information provided pursuant to this Addendum shall be used for no purposes other than those set forth in this Addendum.

EXHIBIT B**CALLING NAME DELIVERY (CNAM) DATABASE SERVICES****1. Definitions**

For the purpose of this Attachment, the following terms shall be defined as:

CALLING NAME DELIVERY DATABASE SERVICE (CNAM) - The ability to associate a name with the calling party number, allowing the end user subscriber (to which a call is being terminated) to view the calling party's name before the call is answered. This service also provides Covad the opportunity to load and store its subscriber names in the BellSouth CNAM SCPs.

CALLING PARTY NUMBER (CPN) - The number of the calling party that is delivered to the terminating switch using common channel signaling system 7 (CCS7) technology, and that is contained in the Initial Address Message (IAM) portion of the CCS7 call setup.

COMMON CHANNEL SIGNALING SYSTEM 7 (CCS7) - A network signaling technology in which all signaling information between two or more nodes is transmitted over high-speed data links, rather than over voice circuits.

SERVICE CONTROL POINTs (SCPs) - The real-time data base systems that contain the names to be provided in response to queries received from CNAM SSPs.

SERVICE MANAGEMENT SYSTEM (SMS) - The main operations support system of CNAM DATABASE SERVICE. CNAM records are loaded into the SMS, which in turn downloads into the CNAM SCP.

SERVICE SWITCHING POINTs (SSPs) - Features of computerized switches in the telephone network that determine that a terminating line has subscribed to CNAM service, and then communicate with CNAM SCPs in order to provide the name associated with the calling party number.

SUBSYSTEM NUMBER (SSN) - The address used in the Signaling Connection Control Part (SCCP) layer of the SS7 protocol to designate an application at an end signaling point. A SSN for CNAM at the end office designates the CNAM application within the end office. BellSouth uses the CNAM SSN of 232.

2. Attachment

- 2.1 This Attachment contains the terms and conditions where BellSouth will provide to the Covad access to the BellSouth CNAM SCP for query or record storage purposes.

- 2.2 Covad shall submit to BellSouth a notice of its intent to access and utilize BellSouth CNAM Database Services pursuant to the terms and conditions of this Attachment. Said notice shall be in writing, no less than 60 days prior to Covad's access to BellSouth's CNAM Database Services and shall be addressed to Covad's Account Manager.

3. Physical Connection and Compensation

- 3.1 BellSouth's provision of CNAM Database Services to Covad requires interconnection from Covad to BellSouth CNAM Service Control Points (SCPs). Such interconnections shall be established pursuant to Attachment 3 of this Agreement. The appropriate charge for access to and use of the BellSouth CNAM Database service shall be as set forth in this Attachment.
- 3.2 In order to formulate a CNAM query to be sent to the BellSouth CNAM SCP, Covad shall provide its own CNAM SSP. Covad's CNAM SSPs must be compliant with TR-NWT-001188, "CLASS Calling Name Delivery Generic Requirements".
- 3.3 If Covad elects to access the BellSouth CNAM SCP via a third party CCS7 transport provider, the third party CCS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Telcordia (formerly BellCore)'s CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish CCS7 interconnection at the BellSouth Local Signal Transfer Points (LSTPs) serving the BellSouth CNAM SCPs that Covad desires to query.
- 3.4 Out-Of-Region Customers
- If the customer queries the BellSouth CNAM SCP via a third party national SS7 transport provider, the third party SS7 provider shall interconnect with the BellSouth CCS7 network according to BellSouth's Common Channel Signaling Interconnection Guidelines and Telcordia's (formerly BellCore's) CCS Network Interface Specification document, TR-TSV-000905. In addition, the third party provider shall establish SS7 interconnection at one or more of the BellSouth Gateway Signal Transfer Points (STPs). The payment of all costs associated with the transport of SS7 signals via a third party will be established by mutual agreement of the Parties in writing and shall, by this reference become an integral part of this Agreement.

4. CNAM Record Initial Load and Updates

- 4.1 The mechanism to be used by Covad for initial CNAM record load and/or updates shall be determined by mutual agreement. The initial load and all

updates shall be provided by Covad in the BellSouth specified format and shall contain records for every working telephone number that can originate phone calls. It is the responsibility of Covad to provide accurate information to BellSouth on a current basis.

- 4.2 Updates to the SMS shall occur no less than once a week, reflect service order activity affecting either name or telephone number, and involve only record additions, deletions or changes
- 4.3 Covad CNAM records provided for storage in the BellSouth CNAM SCP shall be available, on a SCP query basis only, to all Parties querying the BellSouth CNAM SCP. Further, CNAM service shall be provided by each Party consistent with state and/or federal regulation

Exhibit B

EXHIBIT B

Issue Number	Positions of the Parties	BellSouth's Proposed Amendments
1. Line Sharing	<p>Covad: Because BellSouth is obliged to provide access to line sharing under 47 U.S.C. § 271, Covad proposes the same access requirements set forth in the Parties' current IA, with modifications to the pricing consistent with the FCC's TRO guidance. BellSouth's proposed TRO amendment improperly relies on the transitional pricing set forth by the FCC under its 201 and 202 authority and fails to address line sharing ordering after October 2004. However, the just and reasonable standard under 201 and 202, and not the FCC's transitional pricing, applies to the access requirements for line sharing under Section 271. Because BellSouth is obliged to offer line sharing under Section 271, the proper 201 and 202 pricing is the just and reasonable rate, not the transitional rate identified by the FCC. In most instances, the just and reasonable rate will be lower than the rates proposed by BellSouth in its December 4, 2003 IA amendment. Because the access requirements have not changed, Covad is not proposing any change to the existing IA regarding access to line sharing apart from the introduction language in Attachment 2.</p> <p>BellSouth: Covad's petition results directly from the FCC's Triennial Review Order ("TRO") and resulting rules. As a result, the petition constitutes a dispute arising under the change of law provisions in the Parties' Agreement rather than an</p>	<p>Attachment 2, Section 2.11.1. Insert a reference to revised line sharing rates before Exhibit C and include the rate revisions specified in the TRO and applicable federal rules.</p> <p>Attachment 2, Section 2.11.4. Delete subsection 2.11.4.1 and replace with new subsections 2.11.4.1 – 2.11.4.3.</p> <p>Attachment 2, Section 2.11.4. Delete the sentence from the subsections formerly numbered as 2.11.4.2 referring to the interim rates in Exhibit C and renumber subsection to conform with inserted language.</p>

	<p>arbitration petition within the meaning of 47 U.S.C. § 252. The applicable federal rules outline the method of providing access to line sharing at 47 C.F.R. § 51.319(a)(1)(i), which language BellSouth has sought to incorporate into the parties' Agreement. Rather than adopting language consistent with the applicable rules, Covad seeks to circumvent the rules, by incorrectly claiming BellSouth has an obligation under 47 U.S.C. § 271 to provide line sharing. Even if BellSouth had such an obligation, and if, the appropriate standard for determining the rates for such an obligation is that the rates must be "just and reasonable" under 47 U.S.C. §§ 201 and 202, only the FCC would have jurisdiction to review such rates.</p>	
2. Sub-Loop Concentration and Feeder	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The FCC modified the unbundling requirements for sub-loops, limiting incumbent subloop unbundling obligations to distribution loop plant. (TRO, ¶ 254). Consequently, the Agreement should not contain additional subloop unbundling requirements.</p>	Attachment 2, Section 2.6. Delete subsections 2.6.2.2, 2.6.6, and 2.6.2.4.
3. Packet Switching	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The FCC found that carriers are not impaired without access to packet switching, including routers and DSLAMS. (TRO, ¶ 537; 47 C.F.R. § 51.319(a)(2)(i)). The FCC also</p>	<p>Attachment 2, Section 2.1. Add subsection 2.1.2.1.</p> <p>Attachment 2. Delete Section 3.5.</p>

	eliminated the limited exception to packet-switching unbundling. (TRO, ¶ 537). Thus, the Agreement should be modified to delete the language that included packet switching and should also include language that states loops do not include packet switched features, functions or capabilities.	
4 Call Related Databases	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: BellSouth is not required to provide Covad with access to its call related databases (TRO, ¶ 551, <i>see also</i> 552-556, 560; 47 C.F.R. § 51.319(d)(4)(i)(B)). The Agreement should be modified to delete call related databases.</p>	Attachment 2. Delete Section 10.1 – 10.6.
5. Commingling of Services	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The TRO contains specific language concerning the commingling of UNEs and combinations of UNEs with services offered pursuant to tariff. BellSouth has proposed new language at Section 1.9 that tracks the language within the TRO. BellSouth's proposed language at subsection 1.9.1 reflects the language within the TRO at ¶ 579. BellSouth's proposed language at subsections 1.9.1 and 1.9.2 reflects language within the TRO at ¶ 579. BellSouth's proposed language at subsection 1.9.3 reflects language within the TRO at ¶ 580. BellSouth's proposed language at subsection 1.9.4 is consistent with the</p>	Attachment 2. Add Section 1.9, including subsections 1.9.1 – 1.9.4.

	payment arrangement contained within the TRO at ¶ 582, n. 1796.	
6 Greenfield Areas	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The TRO provides that "Incumbent LECs do not have to offer unbundled access to newly deployed or 'greenfield' fiber loops" (TRO ¶ 273; <i>also</i> 47 C.F.R. § 51.319(a)(3)(i)), which finding is reflected in BellSouth's proposed language</p>	Attachment 2, Section 2.1. Add subsection 2.1.2
7. Fiber to the Home Facilities	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The FCC addressed fiber to the home facilities in the TRO at ¶ 277 and in its related rules at 47 C.F.R. § 51.319(a)(3). BellSouth's proposed language incorporates the FCC's findings and rules.</p>	Attachment 2, Section 2.1. Add subsections 2.1.3 and 2 1.4.
8. Hybrid Loops	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language</p> <p>BellSouth's Position: The FCC has set forth narrowly tailored unbundling for hybrid loops that are used to provide broadband services in the TRO at ¶ 289-290 and in its rules at 47 C.F.R. § 51.319(a)(2)(ii). BellSouth's proposed language is consistent with the FCC's directives.</p>	Attachment 2, Section 2.1. Add subsection 2.1.2.5.

<p>9 Loop Termination</p>	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The rules adopted pursuant to the TRO define the local loop network element as a "transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer's premises." 47 C.F.R. § 51.319(a). Facilities that terminate at a mobile, cellular telephone do not fall within this definition. BellSouth's proposed language recognizes that "loops" by definition cannot be used to provide wireless telecommunications services.</p>	<p>Attachment 2, Section 2.1. Add subsection 2.1.2.6.</p>
<p>10. Unbundled Copper Loop – Long ("UCL-L")</p>	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language</p> <p>BellSouth's Position: Within BellSouth's network and pursuant to industry standards all copper loops longer than 18kft have load coils. Without these load coils, voice and narrowband telecommunications services will not work properly on copper-only loops. The only way an Unbundled Copper Loop - Long (over 18kft) can be provisioned, is to use Line Conditioning to remove those load coils. At ¶ 643 of the TRO, the FCC clarified that Line Conditioning is "properly seen as a routine network modification that incumbent LEC's regularly perform in order to provide xDSL services to their own customers". BellSouth does not remove load coils on copper loops</p>	<p>Attachment 2, Section 2.1. Delete subsection 2.1.17.5.</p>

9. Loop Termination	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: The rules adopted pursuant to the TRO define the local loop network element as a "transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer's premises." 47 C.F.R. § 51.319(a). Facilities that terminate at a mobile, cellular telephone do not fall within this definition. BellSouth's proposed language recognizes that "loops" by definition cannot be used to provide wireless telecommunications services.</p>	Attachment 2, Section 2.1. Add subsection 2.1.2.6.
10. Unbundled Copper Loop – Long ("UCL-L")	<p>Covad's Position: Covad rejected BellSouth's proposed language and has not proposed any alternate language.</p> <p>BellSouth's Position: Within BellSouth's network and pursuant to industry standards all copper loops longer than 18kft have load coils. Without these load coils, voice and narrowband telecommunications services will not work properly on copper-only loops. The only way an Unbundled Copper Loop - Long (over 18kft) can be provisioned, is to use Line Conditioning to remove those load coils. At ¶ 643 of the TRO, the FCC clarified that Line Conditioning is "properly seen as a routine network modification that incumbent LEC's regularly perform in order to provide xDSL services to their own customers". BellSouth does not remove load coils on copper loops</p>	Attachment 2, Section 2.1. Delete subsection 2.1.17.5.

	<p>longer than 18kft for its own customers. Therefore, line conditioning relating to UCL-L cannot be classified as a routine network modification. If BellSouth were to offer UCL-L loops in the post-TRO world, it would be providing a superior network to the CLECs. The TRO makes clear that BellSouth is not required to provide such a superior network to the CLECs.</p> <p>In addition, Covad has previously participated in an industry collaborative that adopted line sharing and line conditioning standards within BellSouth. In that collaborative Covad agreed that the removal of load coils on copper loops longer than 18kft was not appropriate. Consequently, BellSouth's proposed language properly deletes language relating to the UCL-L</p>	
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Exhibit C

**Amendment to the Agreement
Between
DIECA Communications, Inc. dba Covad Communications Company
and
BellSouth Telecommunications, Inc.
Dated December 19, 2001**

Pursuant to this Amendment, (the "Amendment"), DIECA Communications, Inc. dba Covad Communications Company (Covad), and BellSouth Telecommunications, Inc. ("BellSouth"), hereinafter referred to collectively as the "Parties," hereby agree to amend that certain Interconnection Agreement between the Parties dated December 19, 2001 ("Agreement") to be effective thirty (30) calendar days after the date of the last signature executing the Amendment.

WHEREAS, BellSouth and Covad entered into the Agreement on December 19, 2001, and,

NOW THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby covenant and agree as follows

1. The Parties agree to delete rates, terms and conditions for the following Sections from Attachment 2, Network Elements and Other Services.

Section	Section Name
2.1 17.5	UCL/long: Unbundled Copper Loop/long (UCL/long)
2.6.2.2	Unbundled Sub-Loop Concentration/Multiplexing Functionality
2.6.2.4	Unbundled Sub-Loop Feeder
2 6.6	Unbundled Sub-Loop Concentration System (USLC)
3.5	Packet Switching Capability
10 1-10.6	Operator Call Processing, Inward Operator Services and Directory Assistance Services

2. The Parties agree to add Section 1.9 to Attachment 2, Network Elements and Other Services, as follows

1.9 Commingling of Services

1 9 1 Commingling means the connecting, attaching, or otherwise linking of a Network Element, or a Network Element combination, to one or more telecommunications services or facilities that Covad has obtained at wholesale from BellSouth, or the combining of a Network Element or Network Element combination with one or more such wholesale telecommunications services or facilities

- 1.9.2 Subject to the limitations set forth elsewhere in this Attachment, BellSouth shall not deny access to a Network Element or a combination of Network Elements on the grounds that one or more of the elements:
1) is connected to, attached to, linked to, or combined with such a facility or service obtained from BellSouth, or 2) shares part of BellSouth's network with access services or inputs for non-qualifying services.
 - 1.9.3 BellSouth will not "ratchet" a commingled circuit. Unless otherwise agreed to by the Parties, the Network Element portion of such circuit will be billed at the rates set forth in this Agreement and the remainder of the circuit or service will be billed in accordance with BellSouth's tariffed rates
 - 1.9.4 When multiplexing equipment is attached to a commingled circuit, the multiplexing equipment will be billed from the same jurisdictional authorization (agreement or tariff) as the higher level of service and the Central Office Channel Interfaces will be billed from the same jurisdictional authorization (agreement or tariff) as the lower level of service
3. The Parties agree to add Sections 2.1.2.1-2.1.2.6 to Attachment 2, Network Elements and Other Services, as follows
- 2.1.2.1 The Loop does not include any packet switched features, functions or capabilities
 - 2.1.2.2 In new build (Greenfield) areas, where BellSouth has only deployed Fiber To The Home (FTTH) facilities, BellSouth is under no obligation to provide Loops.
 - 2.1.2.3 In FTTH overbuild situations where BellSouth also has copper Loops, BellSouth will make those copper Loops available to Covad on an unbundled basis, until such time as BellSouth chooses to retire those copper Loops using the FCC's network disclosure requirements. In these cases, BellSouth will offer a 64kbps second voice grade channel over its FTTH facilities.
 - 2.1.2.4 Furthermore, in FTTH overbuild areas, BellSouth is not obligated to ensure that copper Loops in that area are capable of transmitting signals prior to receiving a request for access to such Loops by Covad. If a request is received by BellSouth for a copper Loop, BellSouth will restore the copper Loop to serviceable condition if technically feasible. In these instances of Loop orders in an FTTH overbuild area, BellSouth's standard Loop provisioning interval will not apply, and the order will be handled on a project basis by which the Parties will negotiate the applicable provisioning interval
 - 2.1.2.5 For hybrid loops, where Covad seeks access to a hybrid loop for the provision of broadband services, BellSouth shall provide Covad with nondiscriminatory access to the time division multiplexing features, functions and capabilities of that hybrid loop, including DS1 or DS3, on

an unbundled basis to establish a complete transmission path between BellSouth's central office and an End User's customer premises.

- 2.1.2.6 Covad may not purchase Loops or convert Special Access circuits to Loops if such Loops will be used to provide wireless telecommunications services.
4. The Parties agree to insert the language "revised line sharing rates" in Section 2.11, subsection 2.11.1 immediately prior to the existing reference to Exhibit C. The parties further agree that the attached rates constitute the revised line sharing rates.
5. The parties agree to delete subsection 2.11.4.1 in Section 2.11.4, and replace it with the following language
- 2.11.4.1 Line Sharing arrangements in service as of October 1, 2003, will be grandfathered until the earlier of the date the End User discontinues or moves service with Covad. Grandfathered arrangements pursuant to this Section will be billed at the revised line sharing rates set forth in Exhibit C.
- 2.11.4.2 For the period from October 2, 2003, through October 1, 2004, Covad may request new Line Sharing arrangements. For Line Sharing arrangements placed in service between October 2, 2003, and October 1, 2004, the rates will be as set forth in the revised line sharing rates in Exhibit C. After October 1, 2004, Covad may not request new Line Sharing arrangements under the terms of this Agreement.
- 2.11.4.3 The rates set forth herein will be applied retroactively back to the date set forth in the Triennial Review Order.
- 2.11.4.4 As of the earlier of October 2, 2006, or the date that the End User discontinues or moves service with Covad, all Line Sharing arrangements shall be terminated.
6. The Parties agree to delete the following sentence from Section 2.11.4, subsection 2.11.4.2: "The interim rates set forth in Exhibit C were adopted as a result of compromise between the parties and do not reflect either party's position as to final rates for access to High Frequency Spectrum."
7. All of the other provisions of the Agreement, dated December 19, 2001, shall remain in full force and effect.
8. Either or both of the Parties are authorized to submit this Amendment to the respective state regulatory authorities for approval subject to Section 252(e) of the Federal Telecommunications Act of 1996.

COST ID	CATEGORY	NOTES	UNBUNDLED NETWORK ELEMENT	Initiation	Zone	BCS	USOC	RATES				OSS RATES				
								Fee	Measuring	Nonmeasuring	Source	By Order Submitted per LAR	By Order Submitted Manual LAR	Incremental Charge Manual Svc Order vs Electronic 1st	Incremental Charge Manual Svc Order vs Electronic 1st	Incremental Charge Manual Svc Order vs Electronic 1st
								Net	Add	Net	Add	Net	Add	Net	Add	
LINE SHARING																
NOTE 1 The Line Sharing monthly recurring rates for all installations completed from October 02, 2003 through midnight October 01, 2004 shall be billed as follows																
NOTE 1 10/02/2003 - 10/01/2004 25% of the rate for an unbundled copper loop non-designed (UCLND)																
NOTE 1 10/02/2004 - 10/01/2005 50% of the rate for UCLND																
NOTE 1 10/02/2005 - 10/01/2006 75% of the rate for UCLND																
NOTE 1 Above will apply to USOCs ULSDT and UL SCT																
**NOTE 2 The Line Sharing monthly recurring rates with USOCs ULSDC and ULSCC applies only to circuits installed and in service on or before October 1, 2003																
LINE SHARING																
SPLITTERS-CENTRAL OFFICE BASED																
J 4 1			Line Sharing Splitter, per System 96 Line Capacity			US	ULSDA	100.00	0.00	0.00	0.00	OR		20.35	10.54	13.32
J 4 2			Line Sharing Splitter, per System 24 Line Capacity			US	ULSDB	25.00	0.00	0.00	0.00	OR		20.35	10.54	13.32
J 4 6			Line Sharing-DLEC Owned Splitter in CO-CFA activation-deactivation (per LSOD)			US	ULSDG	163.06	0.00	92.71	0.00	OR		20.35	10.54	13.32
END USER ORDERING-CENTRAL OFFICE BASED LINE SHARING																
Located (25% of UCLND) - please see NOTE 1 (E 10/2/2003)																
			Line Share Service, TRO per line activation, BST owned splitter - Central Office			US	ULSDT	2.94	40.00	31.39	0.00	OTH		20.35	10.54	13.32
			Located (50% of UCLND) - please see NOTE 1 (E 10/2/2004)			US	ULSDT	5.87	40.00	31.39	0.00	OTH		20.35	10.54	13.32
			Line Share Service, TRO per line activation, BST owned splitter - Central Office			US	ULSDT	8.81	40.00	31.39	0.00	OTH		20.35	10.54	13.32
			Located (75% of UCLND) - please see NOTE 1 (E 10/2/2005)			US	ULSDS	30.00	15.00			OR		20.35	10.54	13.32
J 4 4			Line Sharing - per Subsequent Activity per Line Rearrangement(BST Owned Splitter)			US	ULSDS	30.00	15.00			OR		20.35	10.54	13.32
J 4 4			Line Sharing - per Subsequent Activity per Line Rearrangement(DLEC Owned Splitter)			US	ULSDS	30.00	15.00			OR		20.35	10.54	13.32
J 4 4			Line Share Service, TRO per line activation, CLEC owned splitter - Central Office			US	ULSCT	2.94	47.44	19.31	0.00	OTH		20.35	10.54	13.32
J 4 4			Located (25% of UCLND) - please see NOTE 1 (E 10/2/2003)			US	ULSCT	5.87	47.44	19.31	0.00	OTH		20.35	10.54	13.32
J 4 4			Line Share Service, TRO per line activation, CLEC owned splitter - Central Office			US	ULSCT	8.81	47.44	19.31	0.00	OTH		20.35	10.54	13.32
J 4 4			Located (75% of UCLND) - please see NOTE 1 (E 10/2/2005)			US	ULSCT	8.81	47.44	19.31	0.00	OTH		20.35	10.54	13.32
MAINTENANCE																
No Trouble Found - per 1/2 hour increments - Basic																
No Trouble Found - per 1/2 hour increments - Overtime																
No Trouble Found - per 1/2 hour increments - Premium																

**Unbundled Network Elements
Tennessee**

COST ID	CATEGORY	NOTES	Instream Zone	BCS	USOC	RATES			OSS RATES					
						Rec	Nonrecurring	Nonrecurring Discounted	Source	Svc Order Submitted - Electronic per LSR	Svc Order Submitted - Monthly per LSR	Incremental Charge - Manual Svc Order vs Electronic 1st Add'l	Incremental Charge - Manual Svc Order vs Electronic 1st Add'l	Incremental Charge - Manual Svc Order vs Electronic 1st Add'l
		LINE SHARING												
		NOTE 1 The Line Sharing monthly recurring rates for all installations completed from October 02, 2003 through midnight October 01, 2004 shall be billed as follows												
		NOTE 1 10/02/2003 - 10/01/2004 25% of the rate for an unbundled copper loop non-designed ("UCLND")												
		NOTE 1 10/02/2004 - 10/01/2005 50% of the rate for UCLND												
		NOTE 1 10/02/2005 - 10/01/2006 75% of the rate for UCLND												
		NOTE 1 Above will apply to USOCs ULSDT and ULSDT												
		**NOTE 2 The Line Sharing monthly recurring rates with USOCs ULSDC and ULSCC applies only to circuits installed and in service on or before October 1, 2003												
		LINE SHARING												
		SPLITTERS-CENTRAL OFFICE BASED												
J 4 1		Line Sharing Splitter, per System 96 Line Capacity		ULS	ULSDA	100.00	150.00	0.00	0.00	0.00		20.35	10.54	13.32
J 4 2		Line Sharing Splitter, per System 24 Line Capacity		ULS	ULSDB	25.00	150.00	0.00	0.00	0.00		20.35	10.54	13.32
J 4 6		Line Sharing-DLEC Owned Splitter in CO-CFA activation-deactivation (per LSOD)		ULS	ULSDG		163.06	0.00	92.71	0.00		20.35	10.54	13.32
		END USER ORDERING-CENTRAL OFFICE BASED LINE SHARING												
		Located (25% of UCLND) - please see NOTE 1 (E 10/2/2003)		ULS	ULSDT	2.94	40.00	0.00	0.00	0.00		20.35	10.54	13.32
		Line Share Service, TRO per line activation, BST owned splitter - Central Office		ULS	ULSDT	5.87	40.00	0.00	0.00	0.00		20.35	10.54	13.32
		Located (50% of UCLND) - please see NOTE 1 (E 10/2/2004)		ULS	ULSDT									
		Line Share Service, TRO per line activation, BST owned splitter - Central Office		ULS	ULSDT	8.81	40.00	0.00	0.00	0.00		20.35	10.54	13.32
		Located (75% of UCLND) - please see NOTE 1 (E 10/2/2005)		ULS	ULSDS		30.00	15.00				20.35	10.54	13.32
J 4 4		Line Sharing - per Subsequent Activity per Line Rearrangement(BST Owned Splitter)		ULS	ULSDS		30.00	15.00				20.35	10.54	13.32
J 4 4		Line Sharing - per Subsequent Activity per Line Rearrangement(DLEC Owned Splitter)		ULS	ULSDS		30.00	15.00				20.35	10.54	13.32
		Line Share Service, TRO per line activation, CLEC owned splitter - Central Office		ULS	ULSDT	2.94	47.44	19.31	0.00	0.00		20.35	10.54	13.32
		Located (25% of UCLND) - please see NOTE 1 (E 10/2/2003)		ULS	ULSDT									
		Line Share Service, TRO per line activation, CLEC owned splitter - Central Office		ULS	ULSDT	5.87	47.44	19.31	0.00	0.00		20.35	10.54	13.32
		Located (50% of UCLND) - please see NOTE 1 (E 10/2/2004)		ULS	ULSDT									
		Line Share Service, TRO per line activation, CLEC owned splitter - Central Office		ULS	ULSDT	8.81	47.44	19.31	0.00	0.00		20.35	10.54	13.32
		Located (75% of UCLND) - please see NOTE 1 (E 10/2/2005)		ULS	ULSDT									
		MAINTENANCE												
		No Trouble Found - per 1/2 hour increments - Basic					80.00	55.00				0.00	0.00	0.00
		No Trouble Found - per 1/2 hour increments - Overtime					120.00	82.50				0.00	0.00	0.00
		No Trouble Found - per 1/2 hour increments - Premium					160.00	110.00				0.00	0.00	0.00

CERTIFICATE OF SERVICE

I hereby certify that on July 19, 2004, a copy of the foregoing document was served on the following, via the method indicated:

- ☐ Hand
- ☐ Mail
- ☐ Facsimile
- ☐ Overnight
- ☒ Electronic

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- ☐ Hand
- ☐ Mail
- ☐ Facsimile
- ☐ Overnight
- ☒ Electronic

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Atlanta, GA 30309
gwatkins@covad.com

A handwritten signature in black ink, appearing to read "Charles E. (Gene) Watkins", is written over a horizontal line.